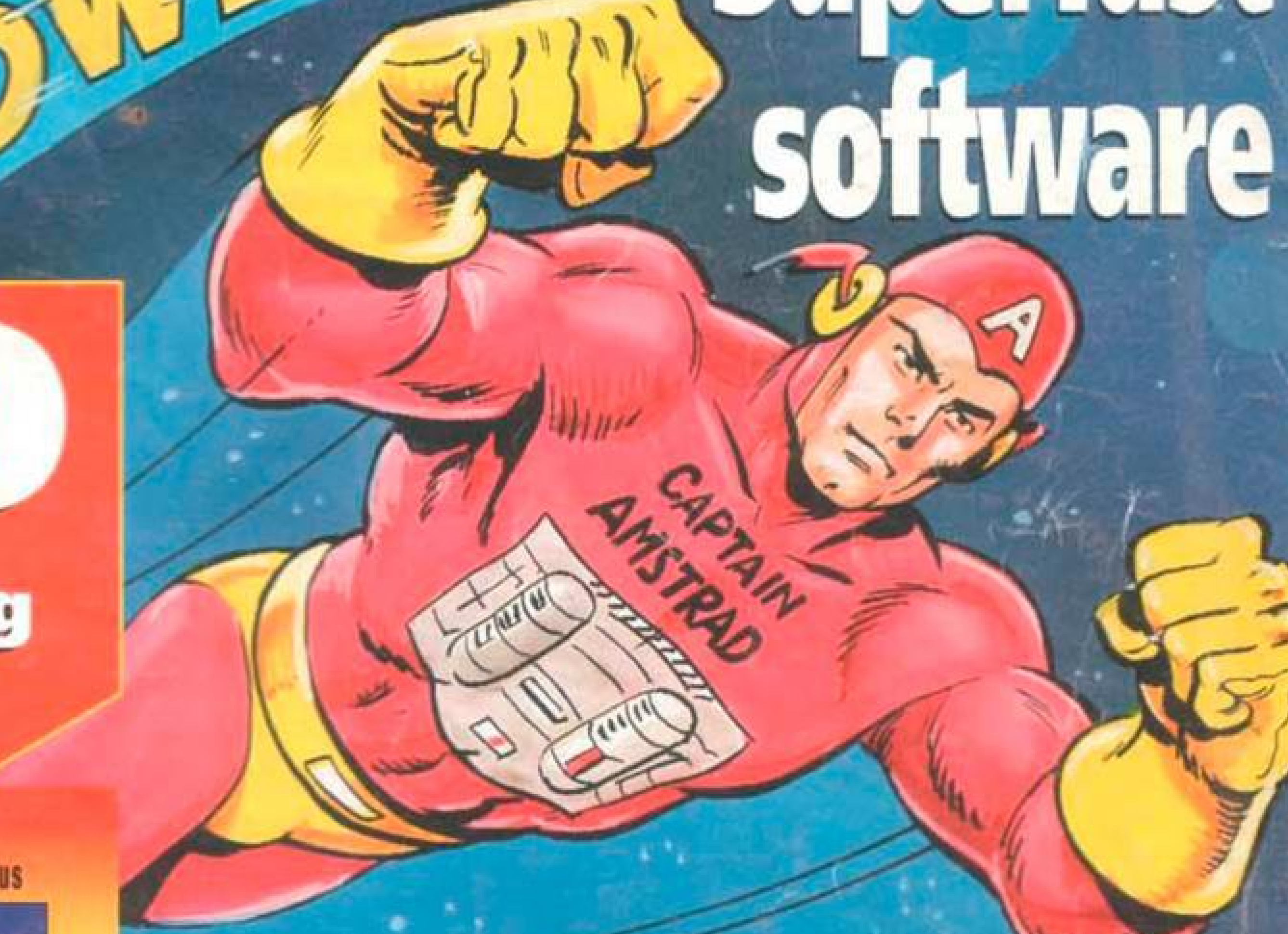
The essential guide to everything that's hot in the CPC world

AMSTRAD ACTION

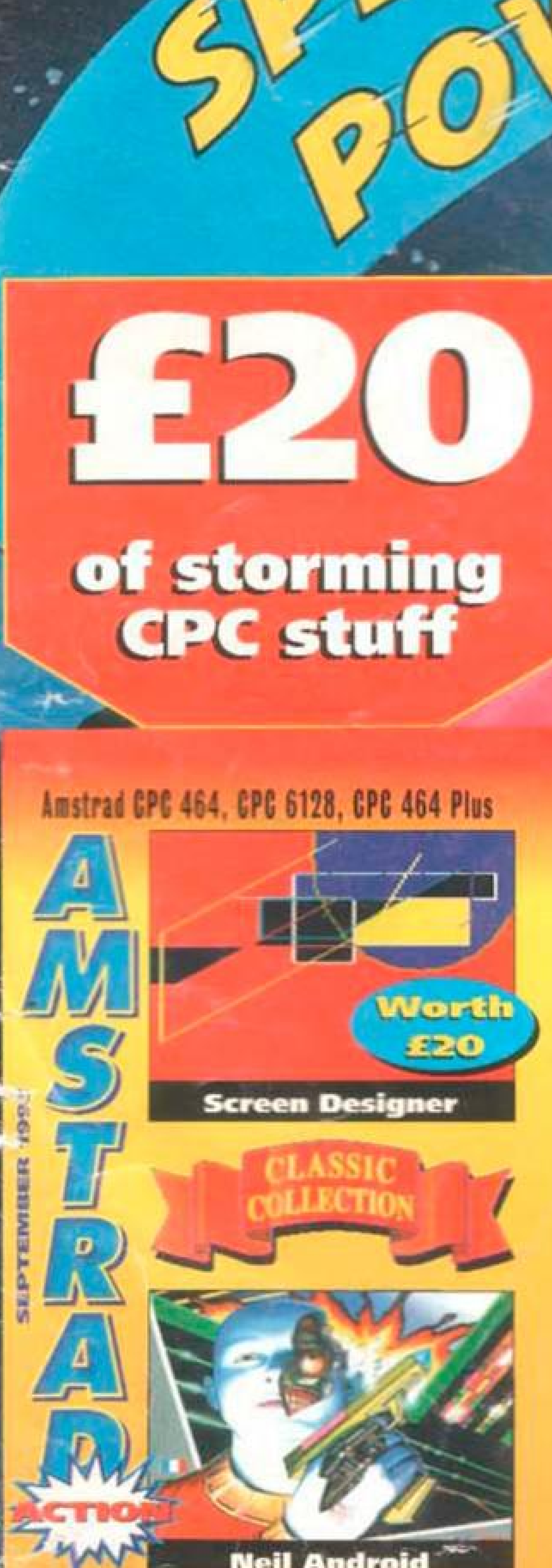
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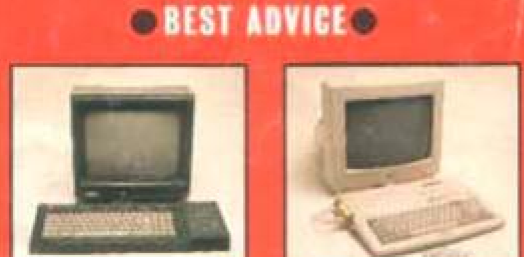


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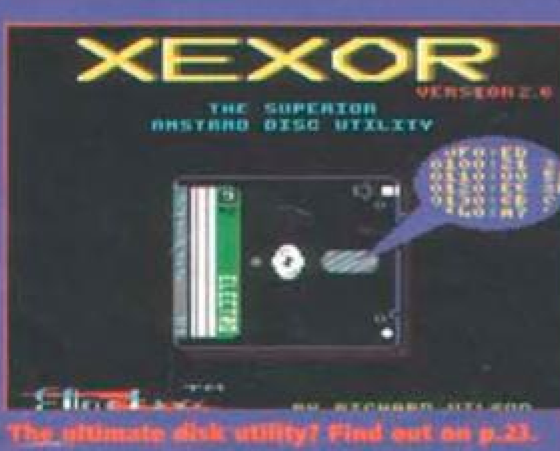


Feature

Frivolous



Rick Dangerous returns... again - p.44.



The ultimate disk utility? Find out on p.23.



Games on cart - are they any good? - p.30.

Regulars

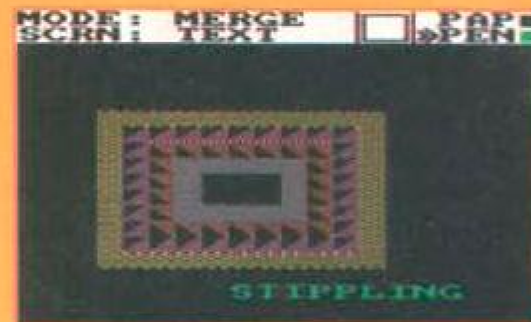
CLASSIC COLLECTION

You could stick our cover cassette in your Walkman and it would, indeed, be preferable to East 17, but we reckon slamming it in your CPC is a much better bet.

Screen Designer

1 Do you feel a need to express yourself artistically? Have you got a profound statement that you can only evoke in purely visual terms. Then Screen Designer's the program that can help you achieve your artistic ambitions. Or you could just use it to create stunning screen designs to use in your programs or impress your friends with. It's up to you, really.

And if you're the sort of artist who wouldn't even win a runners up prize in



You'll be creating patterns like this in seconds (that's how long this one took Dave – and don't say it shows).



Okay, this screen isn't as pretty, but you have to some functional bits as well.

the under-fives section of a Blue Peter design a multi-storey car park competition, don't panic. This program is dead easy to use. No, really. It'll automatically draw straight lines and circles for you, what more could you ask for? A fill facility? You got it. Screen scrolling? Sure. Text facilities? No problem. Over a million colours? Er, this is the CPC we're dealing with here, you know – there are limits.

You'll be creating your very own Old Masters before you can say Leonardo da doo ron ron ron, da doo ron ron.

Neil Android

2 Alien invaders are always bad news. When they turn entire starship crews into walking, three-week old, uneaten indian take-aways look-alikes that'll kill you given half a chance (and we're not talking salmonella here) they're bad news on a Status Quo reunion concert level. So it's time to send in the cyborg to



Look at the angles on that. It's called an isometric viewpoint, apparently.



Why do corridors always play such a big part in science fiction plots? Bizarre.

exterminate the mutating nasties. Yep, I said Cyborg. Nope, don't ask me why the game's called Neil Android. I really don't know. It's just one of things, okay?

Anyway, that's beside the point. The point is that what you've got here is a storming shoot-'em-up played from an isometric viewpoint (which basically means it's all sort of angular so that it looks like... well... er... just look at the grabs, will you, okay?).

Just turn the page for all the details →→→



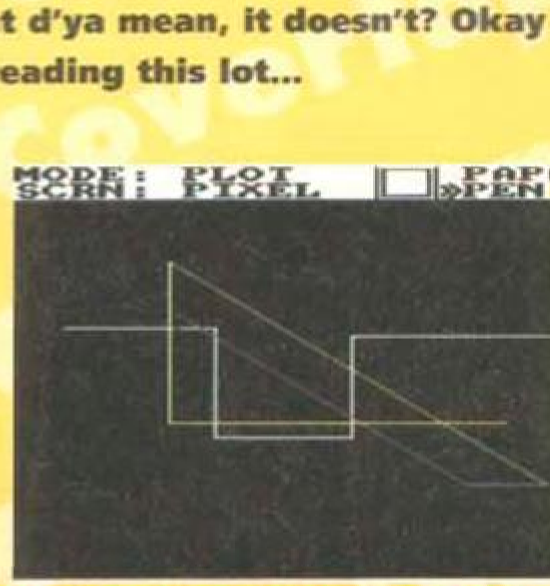


Screen Designer

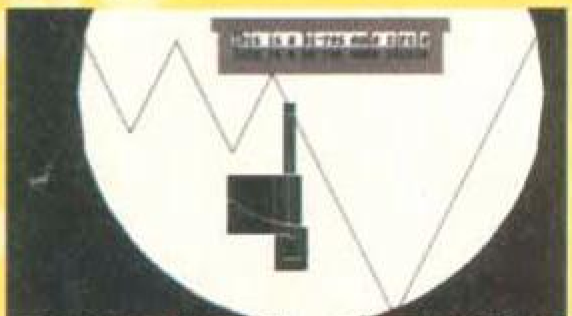
The title says it all, really. What d'ya mean, it doesn't? Okay then, you'd better get started reading this lot...

Admit it. You must have come across a game, or even a serious package, which you've taken one look at and gone, "Great Scott!" (or words to that effect) "I could draw better graphics than that." You reckon? Okay, prove it. What d'ya mean you haven't got the right software? If you bought this mag (and if not give it back to whoever did and buy your own) the very program you need is stuck on the front.

Screen Designer is a dead simple-to-use graphics package that enables you to do such



The info window at the top indicates the current pen colour, in other words, what colour will appear when you start plotting.



Entering hi-res mode – marvel at how smooth that circle is, impress your friends with those fine lines (available in black and white only).

thing as drawing circles and lines automatically while also letting you to get in close and alter your pictures pixel-by-pixel. And, unlike other art packages you don't need a mouse to use it – the whole lot is keyboard and joystick controlled.

When you first load the program you are presented with a menu screen. To highlight an option use the arrow keys and to select it simply hit Return. There are four items in the menu. The one you want for creating your masterpieces is EDIT PICTURE SCREEN. The following functions are all used in EDIT mode; the others items in the menu screen are explained in the Other Bits box.

Edit Picture

All these are accessible from the EDIT screen:

- **Plot Mode (P)** – Puts you into PLOT mode which allows you to draw single-pixel wide continuous lines by moving the cursor around the screen (using either your joystick or the numeric keypad/function keys). Press Space to exit.
- **UNPLOT MODE (U)** – Draws a single-pixel wide continuous line in the PAPER colour. Press Space to exit.
- **SKIP MODE (Space Bar)** – You can move the cursor without drawing a line.
- **SELECT PEN COLOUR (SHIFT, P)** – Select a colour and anything you subsequently draw in



This is an exciting one, eh? To tell the truth I can't quite remember what I was trying to illustrate when I grabbed this one.

Other Bits

Select Screen Mode

Select this item from the main menu and you can change the screen resolutions. The Selection Screen is pretty self explanatory (which is lucky 'cos we're running out of room).



You don't have to put up with painting using pixels like house bricks. Change the screen mode to get finer lines.



The thing to remember about selecting colours is that the number you can choose is limited by what mode you're in.

Change Colour Sets

This option enables you to choose which colours you can use in the EDIT screen. There are 27 from which to choose but the number you can select is limited by which screen mode you're in. The higher the resolution the fewer colours you can have. Swings and roundabouts, as they say.

Save /Load Screens

You can save to tape or disk. The different baud rates save at different speeds – 1000 takes about two minutes, 2000 about one. You can also load previously saved pictures from this screen. If you want to load a pic without running *Screen Designer*, press CTRL and ENTER then start your tape.



Reckon your pictures are worth saving, do you? (Must be better than Dave's then – Andy). Then this is the screen you need.

PLOT mode will be this colour (until you change it again). Press Return to exit.

● **SELECT PAPER COLOUR (SHIFT, U)** – Enables you to alter the UNPLOT mode colour. For some odd reason this function does not change the background colour – to do that use the FILL function. Press Return to exit.

● **BORDER SELECT (SHIFT, B)** – Changes the border colour.

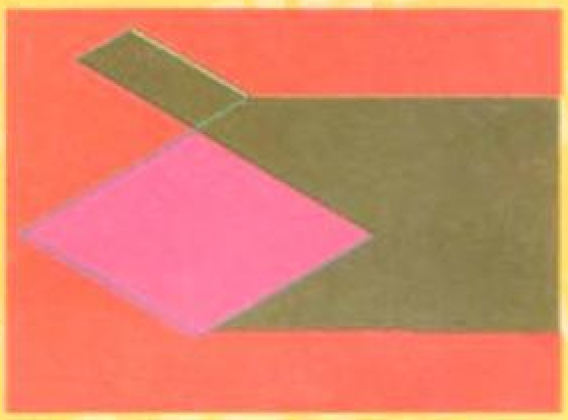
● **TEXT MODE (SHIFT, T)** – Enter Text Mode. Press Return to exit.



Using the STIPPLING options gives you more textures.

● **DRAW LINE (SHIFT, L)** – Draws a straight line between two selected points. Plot a point, then move the cursor (in either UNPLOT or SKIP mode) to where you want the line to end. Press Shift, L to enter the line drawing mode then press Return to draw the line.

● **CIRCLE DRAWING (SHIFT, C)** – Automatically draws a circle around a centre point determined by you. Plot the centre point, then move the cursor to where you want the circumference. Press C plus Shift, then Return to plot the circle.



This shows the dangers of a) trying to FILL when there is a gap in the line and b) letting Dave loose on art package (yuk – Andy).

● **FILL AREA (SHIFT, F)** – Place the cursor inside an enclosed area, press Shift, F and then Return to watch that area fill with your selected colour.

● **SCROLL (SHIFT, S)** – Move your picture around the screen using the arrow keys.

● **MAGNIFY SCREEN (SHIFT, M)**

● **DE-MAGNIFY SCREEN (SHIFT, N)**

● **RETURN TO MENU SCREEN (SHIFT, R)**

● **MOVE CONTROL WINDOW (CLR)**

● **REMOVE CONTROL WINDOW (DELETE)**



This rather tasteful example speaks for itself, really, if you can bear to look at it for more than a couple of seconds, that is.

TEXT MODE

● **TOGGLE BETWEEN PRINT AND MERGE MODE (CTRL, T)** – Both of these modes allow to you put text on to your design simply by typing it in on your keyboard. The first letter will appear at the flashing cursor, which can be moved using the arrow keys. In PRINT mode the letters will have a border around them; in MERGE mode there will be no border. In both modes the Shift key and the Space bar act in the way they normally would in any text editor or word processor.

● **PEN COLOUR SELECT (SHIFT, CTRL, U)** – Alters the colour of any text you subsequently type to your selected colour. Press Return to exit.

● **BACKGROUND COLOUR SELECT (SHIFT, CTRL, U)** – Alters the colour of the border around the letters when you're in PRINT mode.

● **STORE GRAPHICS (CTRL, S)** – Position the cursor over an area of your picture you want to store in memory. Press CTRL, S and the info window will alter. Type a letter in and the area covered by the cursor will be stored and labelled with the letter you just typed in (indicated in the info window). Press Return to exit.

● **PRINT GRAPHICS (CTRL, G)** – Pastes in screen graphics which you saved using the STORE GRAPHICS option. Just position the cursor and type in the letter you used as a label when you stored the graphic (it's a good idea to note down what you label your saved graphics).

● **STIPPLE MODE (CTRL, I)** – Gives you a selection of shaded characters, chosen using the numeric keys at the top of the keyboard. You plot stipple characters using the arrow keys for some odd reason.

● **LARGE CHARACTER PLOTTING (CTRL, P)** – Twice the size, twice the value!

● **LARGE CHARACTER UNPLOTTING (CTRL, U)** – I bet you didn't guess this was coming.

● **RETURN TO PIXEL MODE (RETURN)** – Handy one this.

Show us what you can do

Right, those are the controls, but that's only half the battle. Now you've got to do a bit of work and provide the creative inspiration. And if you do come up with something you reckon is a bit of all right, we're going to give you the chance to show off. In other words, if you send in your creations and we like them (or indeed, laugh at them) we'll print them. Send your *Screen Designer* Masterworks to: *Amstrad Action*, 30 Monmouth Street, Bath, Avon BA1 2BW.

Disk transfer

Unfortunately, you can't transfer *Screen Designer* to disk using the program provided on the *Classic Collection* cassette for some weird technical reason that only people like Simon ever understand. This was also the case with *MasterCalc* last month. Don't panic because all you you have to do to get disk versions of these rather splendid programs is follow the instructions in the panel to the right of this page.

Before you load up read this bit

Just pop the tape into your machine, making sure it's rewound to the start of Side one, press CTRL and ENTER (or type RUN""), then press any key and the tape will start loading.

You'll need to load each side separately, but this month, you won't be able to transfer Screen Designer to disk. Using the token at the bottom of this column, though, you can send off to Ablex for a working disk copy.

The tape won't work? Surely not?

We go to great lengths to make sure that our covertapes work properly. However, if you still have difficulty, try these solutions:

● Loading at several different volume levels (if you're using an external tape recorder).

● Cleaning the tape heads. This can be done with any commercially available cleaning kit.

● Adjusting the cassette recorder's head alignment. The alignment screw is located just to the left of the tape head, and is usually accessible through a small hole. Turn it a fraction at a time with a jeweller's screwdriver. When the crispest sound is heard, the alignment is spot on.

● Tapping the cassette GENTLY against a table edge – the spools may be sticking or jammed.

If you still can't get the tape to load then send the tape, along with a brief description of the problem and a stamped SAE to:

AA96 Covertape Returns, Ablex Audio Video Ltd, Harcourt, Halesfield 14, Telford, Shropshire TF7 4QD

But I want a disk version!

The covertape contains its own tape-disk copying program. To transfer *NEIL Android* to disk, simply follow the instructions on the tape.

● 464 owners with external 3-inch drives will have no problems, but 6128 owners will need a cassette player with a REM socket. Stopping and starting the tape manually is difficult.

● 6128 Plus owners who've had their machines modified to load from tape can transfer the programs to disk, *but must rewind to the start of the tape again before the transfer starts.*

You can also order a disk version of the covertape from our duplicators, Ablex. Snip off the coupon on the corner of this page and send it with a cheque/PO for £2.00 to:

AA96 Disk Offer, Ablex Audio Video, Harcourt, Halesfield 14, Telford, Shropshire TF7 4QD

Please don't return tapes to the AA office. Ever! If you dare, we'll just lose them, and when you ring up to see where it's got to, we'll just make you out to be stupid for not reading this bit in the first place. You have been warned!

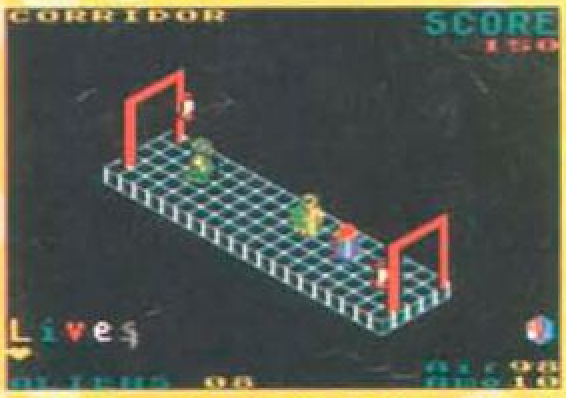
Disk 96 Token

Neil Android

We thought it was about time we gave you a different perspective on life. Or a different perspective on shoot-'em-ups, anyway...

What would you do if your spaceship was invaded by some nasty alien lifeforms that a) are killing your crew b) are reproducing faster than a Pronta Print photocopier, and c) smell like something that's been spewed out of a sewage outlet?

Your first thought might be to break out an extra ration of Airballs©, but that's not going to solve the long-term problem. You could always try communication with them to see if they're just trying to tell you something important (like, Tony Slattery is an intergalactic villain, trying to take over the Earth, starting with total domination of all television channels) and the killing bit is just an unfortunate side effect – very noble, but not very practical. Nope, what you need to do is abandon ship, activate the service droids and send in an



See that green blobby thing in the middle of the corridor? That's you losing a life, that is.

android. Which just happens to be what the crew of the Epic did when they were faced with this particular problem.

Which is fine, unless you happen to be an android. Which you are. In the game, at least. You take control of NEIL, a pretty stupid name for an android, sure, but it's an acronym. And don't ask an acronym for what – your guess is as good as ours. Probably better, in fact since ours was Never Eat Italian Lettuce. Somehow, it doesn't quite have the right ring to it.

Basically, you have to storm through the ship blasting everything that moves (so it should appeal to any US marines). You watch the action from an isometric viewpoint which means that your android moves diagonally and all the rooms are on a strange slant – it's weird at first but you'll soon get the hang of it. Simon's tip is to hold your joystick so that the directions match the ones on



Oh no! The aliens have melted two of the walls and the ceiling.

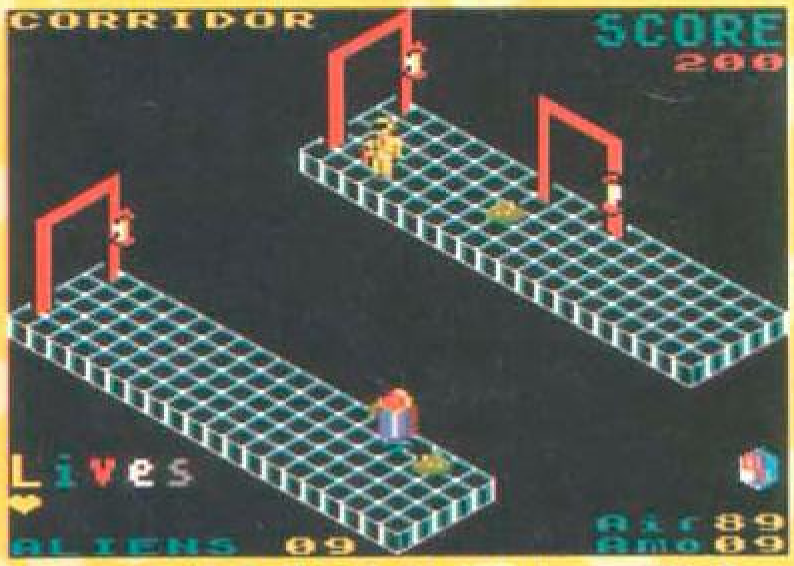
Complete Control

You can redefine the controls in *NEIL Android*, but, to be frank – DON'T. We've had some trouble with the energy cells when we tried to alter things a bit. So, here are the controls as they stand (the best way to describe this is to think of the screen in compass terms with North at the top of the screen):

- **NW – Joystick forward**
- **SW – Joystick left**
- **SE – Joystick down**
- **NE – Joystick right**
- **Use Energy cells – Enter key**
- **Pause – Space Bar**

screen (*hey, that should be on* The Big Breakfast's *Super Hints – "Your guide to a better life" – Simon*). You might find it a bit weird at first but you'll soon get the hang of it.

The aliens come in different forms: some appear first as slimy puddles which then rapidly evolve into full-blown aliens that scuttle around the ship like they've been watching too many episodes of *Doctor Who* (you know, like the poor chap inside is having trouble bending his knees, let alone walking); others move about the ship invisibly but have to show themselves to attack you; some can strike from a distance by spitting green goo at you. But at any stage in their evolution, contact with them is lethal, so avoid anything even slightly green at all costs; it might look like a harmless, abandoned, rather well-used handkerchief to you but you never know might develop into when you back's turned (or, indeed, when you're looking straight at it – these aliens have no shame).



That thing that looks like a dustbin in the lower corridor is actually a servo droid. They're pathetically dim but very useful. Kill them and they leave their energy cells behind.

Watch out for the servo droids as well. If they bump into anything living (which includes you – androids do have some living tissue, you know) every living thing in that room will die (except you, unless it's you they've hit – did you follow that?). If you blast



Going up. Next floor, aliens, lingerie, aliens, home furnishings and more aliens.

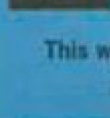
the droids they leave behind energy cells which you can pick up. To find out what you can do with these check out the box, Energize.

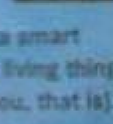
There are four levels to explore which you reach using the turbo lift (and we know where it is but we're not letting on, 'cos we're mean like that – hah!). So, what are you waiting for – *Aliens 4*? Forget all that nonsense. Beam NEIL on to that ship and get blasting.

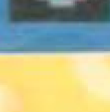
Energize

At the bottom of the screen are your lives, ammo and air read-outs. You start off with four lives and, in time-honoured tradition, when they run out, that's game over.

Air starts at 100 and decreases. Ammo starts at 10 and decreases as you blast away. But you can restock on both. Y'see when you blast a droid it leaves behind its energy cell which NEIL can pick up. This causes the energy icon At the bottom right of the screen to toggle through these different settings:


This will give you extra oxygen if the oxygen counter is flashing.


This will give you loads of extra ammo if you press Enter


Press Enter to explode a smart bomb which'll kill every living thing on-screen (er, except you, that is).

Amscene

What's hot and not what's not on the CPC news front.



Meet Dave 'Teeth' Golder... (Simon, you're fired – Dave).

Hang on! Who's he?

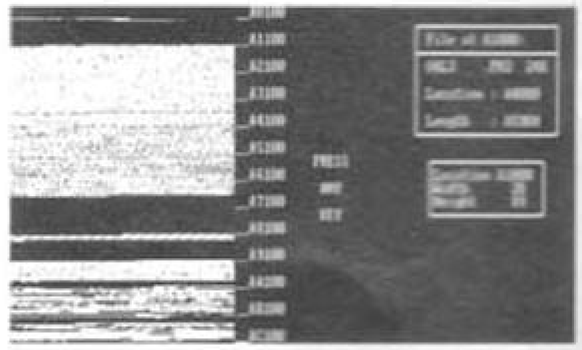
Eight years ago a magazine called *Amstrad Action* hit the newsagents. It was the first magazine from a company called Future which has since grown to be the largest publisher of computer games magazines in the UK, with mags that set the trends. *AA* was also the first computer magazine to cover mount games in cassette form (see, I told you we were trend setters). And as *AA* approaches its 100th edition it also acquires its eighth editor... er, me, Dave Golder. And here's a photo to prove it. And I'm proud to be taking over a magazine with such a prestigious history. And I'd like to thank my manager, my mother, all my fans... (*oh, shut up – Simon*).

Sentinel Software

The lads at Sentinel have a few announcements for the CPC world. Owing to competition from continental quarters, *Zap'T'Balls* has now dropped to an all-time low of £13.99.

Also, *Soundtrakker* is available on 10 per cent discount to subscribers of *AA*, *CPC User* or *Artificial Intelligence*. To prove you subscribe to *AA*, send along a copy of a Subs Club newsletter with your order. Contact Sentinel Software, 41 Enmore Gardens, East Sheen, London, SW14 8RF.

We've also been sent a preview copy of a rather nifty package called *The Ultimate Sprite Searcher*, so expect a review some time soon.



Coming soon from Sentinel, TUSS – The Ultimate Sprite Searcher. Review next issue.

Everything In Modulation

For anyone who's got a SCART TV and wants to use their CPC Plus without faffing around with that huge monitor it comes with, WAVE have a new Plus modulator which gives a full power supply and SCART output. The unit costs £49.95, and can be bought from WAVE, who are on (0229) 870000.

Venture FORTH

Software Promotions have just released what looks to be a pretty good FORTH compiler. We'll have a review for you next month (space, time, and air is running out), so sit tight, and prepare to learn a new language!

That's Entertainment!

This year's Future Entertainment Show is expected to attract a record number of visitors. The show, which will be held at the Grand Hall, Olympia, London, from 11th to 14th November, will be a ticket-only affair to prevent a repeat performance of last year's show at Earl's Court where thousands of people had to be turned away.

As well as the usual festivities and large corporations showing off their latest games, there'll be a live *GamesMaster* broadcast on the opening Thursday. CPCers can expect to find Core Design (who did *Rick Dangerous*), Siren Software, Datel and many others among the fray.

Tony Keefe, one of the events organisers, reckons: "There are going to be a lot of unhappy people this year who leave it too late to get a ticket. All I can say to everyone is that it is vital they book early."

Take our advice, and take his advice. The hot-line (051 356 5085) is now open, and a ticket will cost you a mere £6.95.

What a con

After the raging success of their first convention last year, the UAUG have made plans for a second similar event in October. It's a chance to meet other CPC fanatics and suss out all the latest software. It's open to UAUG members only so if you're interested ring the group's membership secretary Gordon Woolliscroft on 0943 463718.

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MAG*SAVE

Please may I have my very own Amstrad Action?

Dear Newsagent, could you please order me a copy of *Amstrad Action*, starting with the October issue, which'll hit the shelves on September 23rd. *Amstrad Action* is published by fabby Future Publishing, and you can order it from your wholesaler. Thanks.

My name...

My address...

....

....

ZXM – Spectrum Emulator

Simon used to own a Speccy, you know. And just recently he got hold of another one, in the form of a 3-inch disk...

It was a sad day when my poor Speccy finally conked out several years back – it took the acquisition of a brand spanking new CPC464 a couple of days later to perk me up. I remember it clearly. It was the week issue 10 of *AA* came out. That was the first issue I bought and I was hooked. All memories of my Spectrum were consigned to some dark, dank corner of my mind. But just recently they've been given a good dusting down, because someone sent me a 16K speccy through the post – in the form of a 3-inch disk. It was a Spectrum emulator.

```
1 2 4 8 16 32 64 128 256 512 102
4 2048 4096 8192 16384 32768 655
36 131072 262144 524288 1048576
2097152 4194304 8388608 16777216
 33554432 67108864 1.3421773E+8
2.6843546E+8 5.3687091E+8 1.0737
418E+9 2.1474836E+9 4.2949673E+9
 8.5899346E+9 1.7179869E+10 3.43
59738E+10 6.8719477E+10 1.374389
5E+11 2.7487791E+11 5.4975581E+1
1 1.0995116E+12 2.1990233E+12 4.
3980465E+12 8.796093E+12 1.75921
86E+13 3.5184372E+13 7.0368744E+
13 1.4073749E+14 2.8147498E+14 5
.6294995E+14 1.1258999E+15 2.251
7998E+15 4.5035996E+15 9.0071993
E+15 1.8014399E+16 3.6028797E+16
 7.2057594E+16 1.4411519E+17 2.8
823038E+17 5.7646075E+17 1.15292
15E+18 2.305843E+18 4.611686E+18
 9.223372E+18 1.8446744E+19 3.68
93488E+19 7.3786976E+19 1.475739

scroll?
```

The other upside to having a Spectrum is that it's got incredibly fast mathematics functions. For instance, when this doubling program was run, the screen just flicked straight up!

An emulator is a program that makes your computer (in your case a CPC) imitate another machine (in this case a Sinclair Spectrum). That's basically all there is to it. So let's load up *ZXM* and see how good an impression it can do.

The first problem you'll come up against when you buy the package is that the one thing Betasoft can't provide you with is a copy of the Spectrum ROM (could you imagine getting into a copyright legal brawl with Amstrad?), so you'll have to provide your own. Just find someone with a Speccy, save a copy of their Speccy ROM to tape using a command listed in the manual and load the tape into ZXM (but check out the box, Beware).

Once you've gone through the start-up sequence (which you only have to do once – not every time you load *ZXM*), you'll be presented with the standard Speccy start-up line. Aaah – nostalgia.

There are only two drawbacks:

● Screen Memory – Though the Speccy screen is held intact in memory, obviously programs that use sprite routines and access screen memory directly won't show up on the CPC screen (as the system it uses isn't compatible with the Speccy). This problem has been overcome with the aid of a command built into the emulator, allowing you to access the Speccy screen as normal. This does, in effect, cure the problem, but it also serves to slow the whole shebang down a little.

● Ports – Every now and again, you will come across a programmer that writes his software to access the ports directly. The causes problems similar to the Plus compatibility situation we hear about in the CPC world.

To see how well *ZXM* could impersonate a Speccy do I decided to put it through its paces in two main areas:

● Simple Usage

In other words, how does *ZXM* cope when pretending to be a Speccy that someone's using to write simple BASIC programs and to carry out simple tasks, ie, routines to carry out complex calculations and recursive operations, or slightly more advanced BASIC programs that require no special functions other than standard BASIC operations? *ZXM* performed these functions perfectly. The ROM copy used is, as the term suggests, an exact copy, and so is not likely to throw up any problems.

● Advanced Functions

By advanced functions, I mean programming tricks using, say, ports that would normally speed up certain areas of operation within an arcade game. This is where you could reasonably expect to come across problems. But get this, you don't.

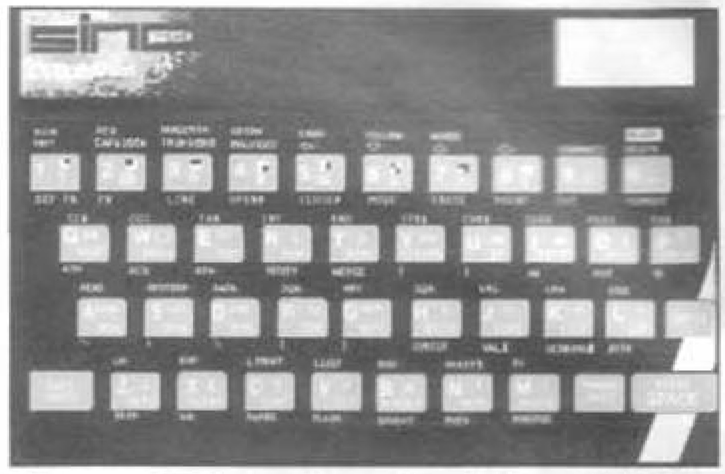
You see, though we experience a lot of compatibility problems on the Plus range when it comes to this kind of software on the CPC, you really won't see as much 'lazy programming' when it comes to the Speccy. Why this is, I'm not quite sure, but it may be due to the fact that (though they are both Z80 machines), the system architecture of the Spectrum is quite different to the CPC.

```
10 FOR n=1 TO 80 STEP 2
20 CIRCLE 128,88,n
25 BEEP .1,n/10
30 NEXT n
```

Not as good as the classic, 10 Print obscenity, 20 Goto 10, is it?

As far as memory limitations go, you may have difficulties finding software that'll fit in what is effectively an old style Speccy, but once you overcome that hurdle, you should be quite successful in using quite a few older games.

All in all, it has to be said that if you once had a Speccy, or if you've always wanted to see what they were like, this is the package for you. The Speccy was one of the first home computers on the market (along with its predecessor, the ZX81), and if you don't use one at least once, you're missing out a huge chunk of home computing history.



When your CPC does an impression of a Speccy it ain't quite this good I'm afraid, but at least you don't have to re-live that yukky rubber key experience.



What you get if you try out the program above – a diagrammatic 'section cut through a tree trunk' simulator. I think.

Beware

As you probably realised quite early on in this review, running the program entails copying the Spectrum ROM. This could be infringing copyright, so it must be stated that both Future Publishing and Betasoft take to responsibility for any legal problems caused in this matter.

Contact

To get your sweaty mitts on ZXM, send a cheque for £4.99 to: Betasoft, 24 Wyche Avenue, Kings Heath, Birmingham B14 6LQ.

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SOFTWARE AT THE

***Well, almost. If you want software that doesn't take an age to load or access then ROMs are the things that'll make you want to stick go-faster stripes on your CPC. Simon Forrester takes you on a lightening tour of all things ROM.**

Are disks getting a little too slow for you? Don't even dare think about tapes? What are you going to do? There must be utilities you use all the time, such as assemblers, word processors and the like, that you would really prefer as an in-built part of your machine, working in much the same way as BASIC, or AMSDOS. So how about a system to do just that?

Well Amstrad, in their divine wisdom, have come to the rescue yet again, by providing the CPC with the ability to handle what are commonly known as sideways ROMs. A sideways ROM is a 16k chip that sits on a little board that you can plug into the back of your machine, which contains software. But you need to have an extra hardware peripheral called a ROMbox to be able to use the ROMs; the easiest way to get hold of a ROMbox is through mail order companies (many of which you can find being advertised in this very magazine), and prices vary from between £20 and £100.



As the software is already stored on the ROM and cannot be erased/altered in any way, it does not need to be loaded into memory, as the chip acts in pretty much the same way as a normal memory chip. So there we have it – software at the speed of... well... something a lot faster than tape or disk, anyway!

Okay, so how do ROMs work? Well, as you probably already know, the contents of your CPC's memory are stored in what are known as RAM chips. These are little black rectangles on legs that can store information electronically. The huge downfall of RAM chips is that as soon as their power source is cut, they lose any information they are storing, and become blank – not a lot of good when you need to keep hold of some information permanently.

Funnily enough, a ROM chip is the answer to all your memory storage problems (*Somehow I knew you were going to say that – Dave*). A ROM chip can interact with your computer in one of two ways:

- **It completely takes it over** – This type of ROM software can be found in utilities such as *HackIt*, in which there is a ROM that, providing the *HackIt* box (a cut-down ROMbox) is turned on, cuts into the machine before even the BASIC ROM has a chance to start doing what it does. This kind of usage is perfect for *HackIt*, as it allows it to interrupt before the CPC ROM gets a chance to erase memory.
- **It adds new commands** – The easiest example of this is the |TAPE command that you need to enter if you have a disk drive attached to your machine and you want to load something from tape. The actual command added is known as an RSX command, and can be used to call up the various routines or one main program in a ROM. Another example is the |PROTEXT command, known to Protext users as the command used to actually run the package.

So that's how ROMs work, but what actual benefits do they have? Well, let's take a look at a few of the available packages you'll be using the most if you decide to get a piece of the action. And the great thing is that the range of ROM software available is nearly as vast as the range of tape and disk software, and there are still CPC organisations churning out ROMs for all to buy.

The price you pay for speed

One of the things you may have noticed about this month's feature is that there are no prices attached to any of the reviews. This isn't because I'm too lazy to research them. It's because they would probably be grossly inaccurate. For instance, the Arnor ROMS could be obtained from one mail order company for a completely different price to another. I guess what we're trying to say is shop around, and see what you can find. But expect to pay somewhere between £20 and £40.

Jargon Busting

EPROM – Erasable Programmable Read Only Memory – A PROM that you can wipe clean and reprogram.

PROM – Programmable Read Only Memory – A ROM which you can program yourself.

RAM – Random Access Memory – A normal memory chip.

ROM – Read Only Memory – A chip that already contains a program and which you can't write on to.

RSX – Resident System Extension, an extra command added to BASIC by a machine code program

Sideways – As in sideways ROM. So called because it sits alongside memory.

We ran a mammoth storage feature in issue 92 which would most definitely prove useful if you want to know a bit more about some of the terms used in this feature. If you don't have a copy of that issue, check out our Back Issue ordering service on page 56.

This way please sir...

'Hmm... nice feature' you're thinking. It may come as a surprise to you, but it wasn't exhaustive. We've completely neglected ROM programming! Or have we? You bet your brother's bedside lamp we haven't. So get those fingers walking to page 34, so that I can bore you rigid with lots of machine code stuff.

E SPEED OF LIGHT*

Protext

The best can get even better (and other clichés).

ROM REVIEW

As well as proving itself to be the best all-round word processing package for the CPC in issue 94 by winning the coveted 'How Many Things Can We Pack Into A Word Processor?' Sugar Award, *Protext* is also wonderfully suited to sitting in a ROM. There are a few main reasons:

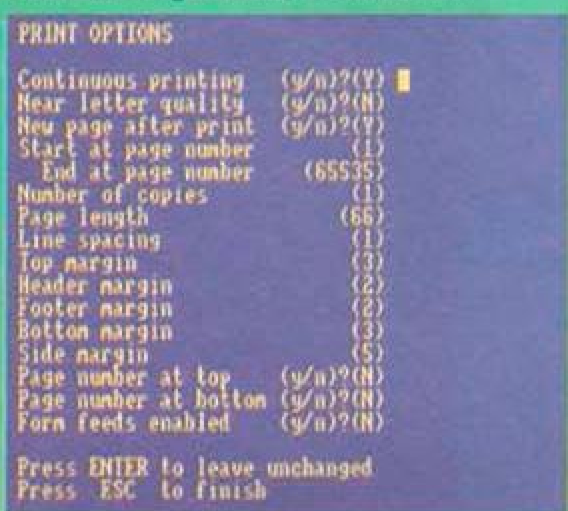
- It's small enough to sit comfortably inside a standard 17k chip, and so conveniently comes on only one ROM, as opposed to several.
- It makes excellent use of memory, meaning that because the actual package itself doesn't have to sit in memory, the full 42k is available for document space.
- In a professional situation (such as writing for a magazine), there's none of that fiddling around with disks just to start writing – all you need to do is type IP and get going!

To expand on the last point, imagine writing *Venture Forth*, but having to fiddle around loading up a disk-based package every time you wanted to switch between BASIC and your word processor! *Protext* on ROM takes the labour out of laborious (*er, that leaves 'ious' – Dave*).

To re-iterate a little on issue 94, *Protext* is pretty much the best WP package that'll fall into the average human being's price range.

As for your own need for a word processor, the practical uses are obvious – writing letters, homework, you name it really. Most of the letters we receive here at *AA* are word processed; some even come in on disk – there's no real need for a printer. Also, as you'll see later on, the ROM version of *Protext* works well in conjunction with many other packages.

The final advantage of buying *Protext* on ROM is that it's upgradeable – there are loads of extra modules (each available on their own separate ROM), such as a spelling checker, mail merger, print enhancer and much more!



Yesiree, there's nothing like a nice huge range of options to get the heart pounding.



We're professional here, you know. We write whole sentences and everything. This one was Cheat Mode.

CONTACT:
Arnor, 611 Lincoln Road, Peterborough PE1 3HA ☎ (0733) 68909.

MAXAM

Free up more memory when you want to do some serious assembling

ROM REVIEW

Right, I mentioned in the *Protext* review that it can be used in conjunction with other packages. One of these packages is the assembler *MAXAM 1.5*. The 1.5 bit denotes the fact that this is a later version of *MAXAM* without the text editor, as *Protext* is much easier to use than any simple text editor ever was.

For anyone who doesn't already have *Protext*, *MAXAM* is available complete with a text editor of its very own, but here, I'm going to concentrate on its main uses, not its text editor.

An assembler is a machine code programming tool – it's the one we use in Assembly Line, because it's the most comprehensive, easy to use and powerful assembler commercially available for the CPC. In short, an assembler is a program that takes assembly language listings (you'll find some in Assembly Line), and converts them into numbers (which is how the machine understands the language).

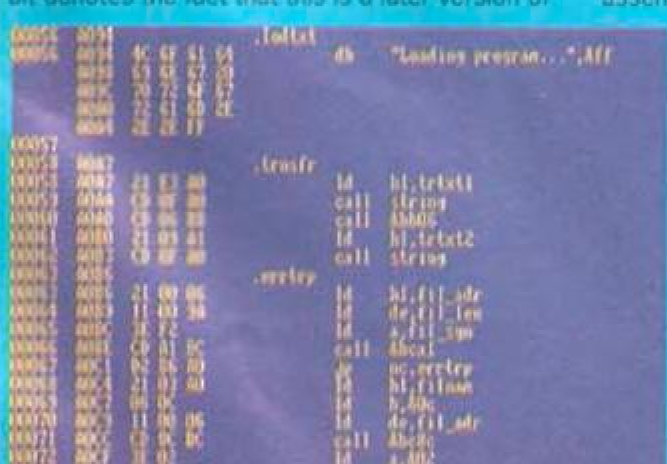
The advantages of having *MAXAM* on ROM are considerable:

- As machine code programs can be written to any area of memory, it makes sense to have every area of memory free, and available for your own program. A ROM doesn't take up any real memory, and so is perfect for the job.
- The environment you run machine code programs in (normal CPC) is completely different to the environment you write code in (an assembler), and so a ROM assembler is very handy to say the least, allowing hassle-free and quick programming, instead of writing files out to disk and loading them in separately, then having to re-load the assembler afterwards.

Not surprisingly, *MAXAM* won a Sugar Award for 'Technical Thing That Most People Can't Understand' a few issues back, but it's an essential package, even on tape or disk, for anyone who wants to turn their machine inside out.



I could say whatever I want here, really, 'cos the odds are you don't understand a single bit of it!



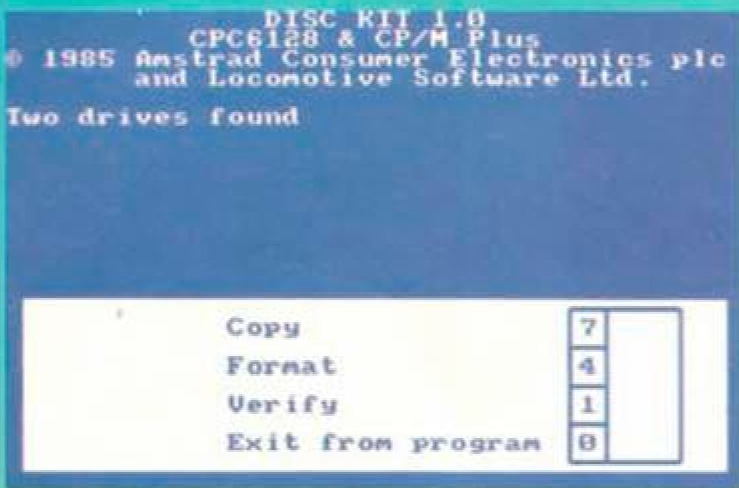
Here we can see the mnemonic code translated into opcodes, cross-referenced with memory addresses.

CONTACT:
Arnor, 611 Lincoln Road, Peterborough PE1 3HA ☎ (0733) 68909.

CP/M

Can even ROMs make CP/M more bearable? You'd better believe it.

Personal opinions about packages that are about as interesting as Sunday morning television programs about the Greek language aside, I reckon *CP/M* is a pig to use. It's the package that comes free with your CPC (if you buy a disk drive), and contains various utilities, from Digital Research LOGO to disk formatters and copiers.



CP/M, eh? It's slow, it's antiquated, it's boring and it crashes to reset every time someone next door inhales too heavily, so we're not really sure why you'd want the ROM. If you do, there's one available (but we're not sure where).

The reason it's such a pain is because you have to go through a lengthy loading process from your original disk, and have a CP/M disk half full of CP/M system files in your drive every time you want to execute a command. Using this package is, in short, like taking your A-levels again.

This is where the ROM version really comes in handy. You see, all the normal CP/M commands are actually stored in memory (well, on ROM really), so you don't have to fiddle around with system disks and copy new work disks every time you want to scratch your nose.

So when a suite of excellent AMSDOS disk utilities are released by the right-thinking moral majority, and the CPC-using world looks set to be condemned to using user-friendly (ie, ones which don't mysteriously crash at important moments), powerful and flexible disk utilities, Graduate Software save the day by releasing *CP/M* on ROM, allowing us all to lead hassle-filled lives once more.

Seriously though, there are a lot of *CP/M* fanatics out there, who have managed to find loads of useful things to do within the language, who might be very interested to get their hands on a copy. The only problem is that in order to buy it, you have to send off your original disks, but hey, with a bit of luck the postman might lose them for you.



Seriously though, folks (*that's the second time you've said that – Dave*), if you do actually have a use for it, *CP/M* may be a large part of your CPCing activities, and if this is the case, you should really do two things:

- Seriously consider buying *CP/M* on ROM, as it'll save time, hassle, and headaches.
- Slip into this nice jumper with the arms that go round the back. Go on, because the nice men are coming soon, and they'll want to talk to you about your head... (*it's time for another 'seriously, though', I think – Dave*).

Copyright

There is one point we really think we should stress to the point of irritation at this point (*sorry, what's your point? – Dave*). It is: there are many people out there who blow their own ROMs. The one thing we really wouldn't want anyone to do is attempt to put CP/M on to ROM themselves. Graduate Software have Amstrad's permission. You don't have their permission. Don't try it, as they'll probably sue you to death for it.

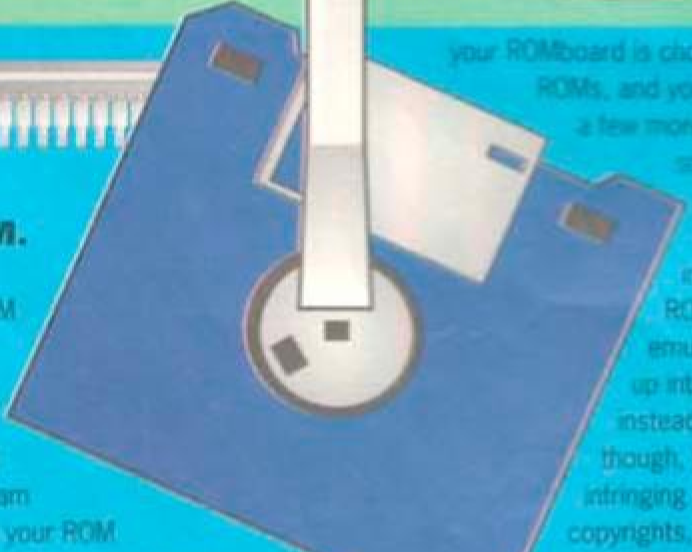
CONTACT:
Er, Graduate Software, where are you? Get in touch, please!

RAMROM

Trick your CPC into thinking it's running ROM.

Okay, this one's a little different. Instead of using ROMs, the RAMROM's main use is writing them. The idea is simple. When you write a ROM program, you're bound to make mistakes. However, you have to blow the program you're developing on to a chip to test it, a lengthy process when you're debugging something, and have to erase the chip before you can write a new version of your program on to it.

The RAMROM is, to be perfectly straightforward here, sideways RAM. It's RAM that thinks it's ROM. Strange, huh? It works in a perfectly simple manner, in that you present the program (supplied on disk) with your ROM image (a file of up to 16k in length), and it copies it into the RAM sideways memory. You then flick a little switch, and the CPC convinces itself that the software is actually on ROM, and so can't write to that area of memory, allowing the information to survive such things as a reset and act just like a normal ROM.





The only real drawback is that as the information is only really stored in a RAM chip, the program you store there probably won't survive a power down, but the purpose of the RAMROM is not to simulate a ROM fully, just to hang around long enough for you to test your program.

One final use of the RAMROM would be for when you reach that horrible stage at which your ROMboard is chock-a-block with ROMs, and you still want to use a few more bits of software. If this is the case, you can take an image of the ROM you want to emulate and load that up into the RAMROM instead. To be honest though, this may be infringing other people's copyrights, so don't do it unless you're ready to start criminal activity at your tender age (whatever that may be) or you want to check the situation out with the copyright holder beforehand.

If you want to know more about programming ROM chips, your best bet is to turn to Assembly Line (which starts a mere 20 pages hence, on page 34 to be precise), because it's taking a break from the normal routine of things this month to go through how to program your very own ROMs. Spooky coincidence, or what? (Or what, probably – Dave.)

CONTACT:
Avatar, 39 Crossfell Road, Leverstock Green, Hemel Hempstead, Herts HP3 8RG
☎ 0442 251706

DOS Systems

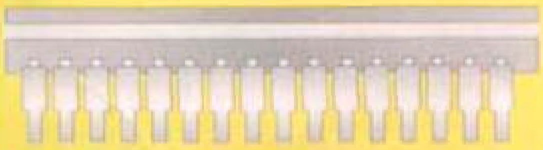
Or, how to use 1Mb disks and avoid all that tedious disk swapping hassle.

You've bought a 3.5-inch drive, and so you've got the potential to store nearly one massive megabyte of information on a disk that'll cost you around 50p a time, as opposed to a disk that'll store a puny 200k for three quid.

The only problem is that you need to buy software that'll actually reconfigure the CPC to access a disk that big, otherwise it'll just think it's a normal (though admittedly cheap) disk.

What you need is software like *RAMDOS*, *ROMDOS* or *S/DOS*. Though they may be full of loads of extra features, their main purpose is to perform this essential alteration to AMSDOS.

If you buy *RAMDOS*, which is the disk version, you will need to re-load the program





every time you reset your machine. THIS IS NO FUN. It is also where thousands of high density drive owners will raise their heads to the heavens and scream out for some simpler way to use their high capacity systems.

And so *ROMDOS* or *S/DOS*, just like the blokey on this month's cover, flies in to the rescue, boasting speed, in that it is instantly accessible, and power, in that it's an incredibly useful and comprehensive tool.

Of all the ROMs you'll benefit from buying, this one really seems a must for high capacity drive owners. It also eliminates incompatibility problems with some pieces of software, as it gets initialized when the ROMs are re-initialized, which would have effectively disabled RAMDOS.

If you have a 3.5-inch drive, you need a ROM high capacity operating system. What more can I say? (Plenty, I'm sure – I've never known you stuck for words before – Dave.)

Well, I'm not really. Stuck for words, that is. I just thought I might be getting near to the end of this bit of the feature. But I'm not, so I've got loads more to say for anyone interested in storing that extra bit more on their disks.

Firstly, you might like to know just how the disks system (with a view to higher capacities) works. Well, to do that we have to take a look at a normal disk. As we said in the storage feature in issue 92, a disk is made up of 40 tracks. Each track is split into nine sectors, each of which can hold 512 bytes (half a kilobyte). 2k of this is taken up by the disk's directory, meaning that a formatted 3-inch disk can store 178k of data.

3.5-inch disks, though they're only 0.5 inches bigger, contain 80 tracks, and are designed so that both sides can be accessed at one time. So a 160 track disk that can hold 10 sectors per track can store 800k of information. Give over 4k of that to directories and the like, and you'll have a disk that'll store 796k! 3.5-inch disks only cost around 50p to £1 a time, so you'll be able to store over four times as much for a third of the price. Oh heck – I've still got a bit left. Okay, quick compo time – how many words can you make from the word 'ROM'?

CONTACT:

ROMDOS; Siren Software, Wilton House, Bury Road, Radcliffe, Manchester M26 9UR ☎ 061 724 7572.

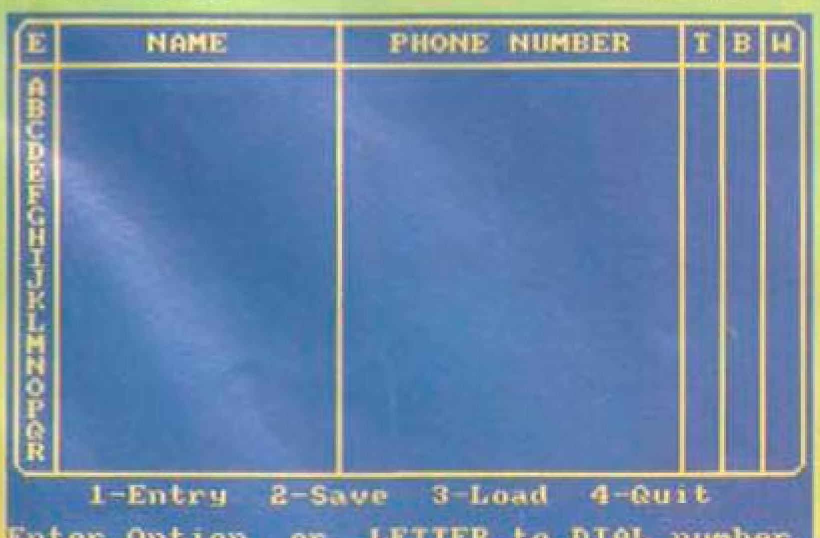
S/DOS; 39 Woodlands Road, Barry, South Wales, CF6 6EF ☎ 0446 736529.

Communications

ROMs are essential if you want to get in on the on-line action

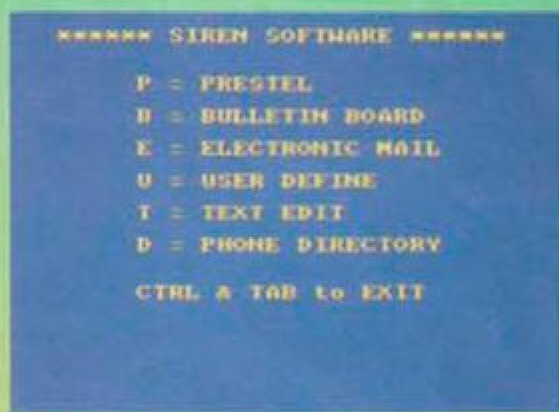
Fair enough, this is a slightly more specialized subject, but it deserves coverage none the less. The situation is really quite simple – in order to use your CPC for telecommunications, you need three things.

- A Modem – Short for MOdulator/DEModulator, it's the actual box that converts computer signals to audio bleeps and squirts them down the phone line at the receiving setup.
- An RS232 Interface – This is the little black box that converts CPC signals into standard RS232 signals that the modem can understand. Lord alone knows why Amstrad deemed it unsuitable to give the CPC a non-standard output on the port front, but they did, and we're stuck with it that way. Ho-hum.
- Communications Software – Finally, at the end of the chain, we have the software that reads what's coming in via the modem, and chucks it on to the screen, as well as reading what you type, and sending it back out to the modem. A communications package is really just a program that turns the CPC into what is known as a dumb terminal, as it has no main functions of its own, and merely lets you communicate with the computer you're calling.



An electronic phone book. I've got an even better one than that – it's made out of paper and written in ink, which means it doesn't have to be loaded and it won't crash or get corrupted. Mad, huh?

When you buy an RS232 interface, what you're getting is a little black box. Inside this box is a lot of technical gubbins to do the interfacing bits, but the odds are, if you're buying your RS232 from Siren Software, or you've got a HoneyTerm interface, the communications package will be inside the black box already. That's right – it's on ROM.



It's the staff writer's rebellion message – don't trust Dave. He's lying to you, and I write all his bits anyway. Worship me! Uh oh where'd that thunderstorm come from...?

You see, inside the RS232 box, there is actually a very cut-down version of a conventional ROMbox, containing one or two chips (two for stuff like *CommStar*), containing all the software you'll need. And believe me, once you've used a system like this you'll never want to return to disk-based comms software again. You never know, you might be using ROMs already, without even knowing it (*cor, strewth, lubberduck, blow me down with a feather, would you Adam 'n' Eve it, guv'nor? – Dave*). Oi, are you taking the mick or something?

Venture Forth

The adventure continues... to be written, that is. This month, Tim wraps up the soap opera-style plot while Simon (who's spreading out alarmingly) gets all picky about objects.

And now, as Frank Sinatra so often says, the end is near. What we're left with, from the point of view of the design of our adventure, is tidying things up and making sure we understand how the game works.

The plot idea we started out with was a little vague. We knew it was something to do with doing the laundry but, to be honest, until the map was drawn and the puzzles devised, it didn't actually have all that much in the way of structure. So let's give it one.

The player wakes up in their bedroom. We tell them they have to do some washing. They find two piles of laundry but discover they can't carry them both without a bag. There are no bags in the house. They find some



money hidden about the house and a set of door keys. They leave the house in search of a laundry bag and some washing powder. They return and collect the laundry. They make their way to the launderette and do the washing. They travel by bus to their friend's house. Simple.

The puzzles, as I ranted on about before, are all fairly straightforward, but it may take a couple of goes before the player is aware of all the things they have to do to solve the game completely. It's all a bit easy for most players but we're just trying to get a game together and kind of demonstrate the sort of things you need to think about when you write one of your very own. But, hey, enough of my whittering on, I think that Simon chap wants needs loads of room for his techy bit, so it's over to him. This is Tim, signing off.

Simon's techy bits

If you haven't been picking things up as we've been been progressing with this 'how to write adventures' series of features, you will after this installment. You see, I'll be finishing off the whole object part of the adventure this time (with a bit of luck). I'll be doing this in two main parts. First off, we've got to add commands to TAKE, DROP, and EXAMINE objects (oh yes, plus we need to create an INVentory command so that you can look in your pockets).

The second thing we need to do is add the puzzles and the object uses. This is where the command USE comes in handy, but be waned, it'll be a lot more complicated than the other new commands, so I'll be taking a heck off a lot longer explaining it.

This month's installment will also take a slightly different form to the previous ones in that this time the routines aren't ready written. If you really want to learn something, you need to dive in head first. You will be getting the solutions at some point in the future (either in a future Venture Forth or on the covertape), but for now, try and write the routines yourselves.

Finally, I'd really appreciate it if you didn't ring in asking for the solutions, as we can't spend all day copying disks for people, dictating programs down the phone or faxing things out – we've got issue 97 to write.

Object Manipulation

TAKE

To take an object, you have to command the program to do four things:

- Check that the object is in the room.
- Check that the object can be moved.
- Make sure that it isn't too heavy to carry.
- Put it in the pocket location.

So you need to add a line to the parser section, to branch the program off to your subroutine. For guidance, take a look at the line that branches the directional controls:

```
IF w$(1)="WEST"OR w$(1)="W"THEN GOSUB
1140:GOTO 110
```

All you need to do now is check that the first word is TAKE, instead of WEST. Your actual routine just has to do the four things listed above then return to the main program.

DROP

Dropping objects is a lot easier. There are just two steps here:

- Make sure the player is carrying the object
- Move the object to the current player location

The ease is due to the fact that when you drop something, it doesn't matter how heavy it is, and it's pretty obvious it's mobile, because you're carrying it already. If you wanted to add a mobility check, you could, but unless you wanted to let the player examine his own body, it'd be pretty pointless.

EXAMINE

Examining an object is really very easy. In effect, you're just printing a string:

- Make sure the object is in the room or the player's pocket.
- Display the description.

In other words, all your final routine does is display strings of description. If you can't manage to work out how to do that by yourself, I'd be very much surprised.

INV

Another really easy one, this. All you've got to do is display a list of all objects currently residing in location 255. This is not an action command – it just gives information to the player.

USEs and Puzzles

Well, that was nice and easy, wasn't it? Tough luck. This is where things start to get a hell of a lot more difficult. We'll begin with the USE command. What we're about to write is the part of the program (apart from the room and object data)



Competition

Now, just like when we gave *GAC* away on the covertape, we're going to have a bit of fun with adventure programming (well, fun for us because we don't have to write them).

What we want you to do is write an adventure. It's as simple as that. You've got 'til the end of October to get those entries in. Send 'em to:

Ooh that Simon's a fantastic writer,
***Amstrad Action*,**
30 Monmouth Street,
Bath, Avon BA1 2BW

We'll do the rest (ie, the judging) and hopefully the best game will get its world premier on the covertape of issue 100.



that is specific to this plot and this plot only. We'll start with the key.

The key is to be used at location 10. When the key is used, the access byte for this location will change from &12 to &32, as the door to the east becomes unlocked. To keep a firm grasp on realism, we'll allow the player to keep hold of the key afterwards, but there's not really much point in programming an option to re-lock the door in an adventure this size. You might like to add one at a later date, as it is, after all, detail that makes an adventure game fun, but for the purposes of this series, I really wouldn't bother. Bucket programming, if you like.

So here's what you need to do:

- Check the user is holding the key.
- Make sure they're at location 10.
- Alter the access byte.

Dead simple, so don't worry your head about that one. The real problem is coming up, as we get down to some serious coding. One thing you might like to try adding are messages for the various stages, depending on what went wrong – the player being in the wrong place, not having the key, trying to pick up a washing machine, throwing themselves out of a thirtieth storey window in desperation, etc.

As you can see, programming an object's use is really quite easy (especially from my side of the bargain this month). But don't rest on your laurels (they're pretty uncomfortable, anyway), let's do some more.

The washing powder needs sorting out. The command we'll be using is USE WASHING POWDER (yeah, okay, predictable, but it's best not to get too cryptic or you just put players off – they're not likely to guess the command if it's something like 'shake those flakes'). So when the player uses the washing powder, the program needs to:

- Check the player is in location 1.
- Check the player is carrying the powder.
- Move the powder to location 254.

The washing machine is a little more complex. We'll give it a location of 254 (hence the number in the last step). This has two main programming tasks involved. First, we're going to add a little patch to our EXAMINE routine, so that when the machine is examined, a list of the objects inside is displayed. This shouldn't pose too many problems to someone who's already waded through the first bits of this episode, though, so let's plough on.

Next, we need the USE command:

- Check the player is in location 1.
- Check the machine contains both sets of money, both sets of laundry and some powder.
- Remove everything from the machine (and place it in location 0), except the laundry itself.

Location 0 is going to be our twilight zone, where we dump objects we don't want the player to use any more.

Oh yeah, we'll need to add a little patch to our TAKE routine, to allow people to take objects from 254 when in location 1, so we can have a washing machine that contains objects and everything! Fun, huh?

No USE

Of course, an adventure that only used the command USE to make

Looking for some inspiration?

Some people say to me, "Please let me out Mr Forrester, I think I'm getting short of air". Others just say, "What's your best advice for coming up with good adventure plots?" And I tend to answer by giving them this set of guidelines:

- For your first adventure, pick a subject you know a lot about, so you can concentrate the programming without having to worry too much about the plot. On subsequent adventures though, feel free to pick a more complex subject.
- Keep descriptions short but entertaining. Don't write it as if it's going in for the Booker Prize.
- Don't have too many rooms. With the system as we have it here, the number of rooms is restricted only by the amount of free memory BASIC has. However, most adventures have only up to 100 locations, because 65 interesting, well-used locations are far better than 200 boring ones.
- Add pictures if you want. If you've got a 6128, this is really easy. All you have to do is patch your description routine to a routine that uses BASIC's DRAW routines in correspondence with the various room numbers. Failing that, I'll be printing a program in Type-Ins next month to save and load pictures (at about quarter screen size).

Muse of the world

Finally, a few new plot ideas you might like to try, explore or expand on. Remember, you see, as far as plots go, your only limitation is your imagination:

- *American Tourist In London* – A variation on the 'American Werewolf...' theme in which everything is mind-blowingly, kodak-snappingly quaint.
- *The Day Dave Golder Ate Manhattan* – Are there enough restaurants in the Big Apple to satisfy his primal urges?
- *The Crazy World Of Cotton Buds* – Does anything this crazy really need explaining? (*Er, yes – Dave.*)
- *Attack Of The Alien Antibodies* – Medical fun down the tubes.
- *Poll Tax Riot Sim* – Take the part of a student who's a bit miffed at having to pay for the services he uses every day. Will he avoid the court summons? Will the local council stop collecting his rubbish? Will he notice?
- *The Quest For The Golden Kebab* – Play the part of a magazine staff writer (*make that a fired magazine staff writer – Dave*) on the quest for peace, light and lots of chilli sauce.
- *Steven Spielberg Adventure* – You play the part of a struggling film actor desperately trying to get noticed amidst several million dollars of special effects. You've won the game when people walk out of the cinema saying, "Wasn't Chuck Wagon good?" as opposed to, "Weren't the special effects good?".
- *Revenge Of W Axl Rose* – Stomp about like a spoilt brat trashing things. The game is finished when you've convinced the press it was all due to a twisted childhood, and write lots of songs about how hard life in America is.



Hold on a minute... Can you name a single person you know of that actually bought both Illusion CDs? If you can, and if it's you, you really should consider medical help.

- *New Age Of Metal Simulator* – You play the part of a late developer, who suddenly decides thrash metal is fashionable when hearing Metallica at the Freddie Mercury Tribute gig. Your aim is to become completely sad by getting hold of every piece of Metallica memorabilia you can – all the albums, singles, limited editions, T-shirts, caps, toenail clippings...
- Basically, as you can probably work out from this list, anything goes when it comes to thinking up adventure ideas. If you're having trouble thinking of an idea, just flick through a newspaper, watch the news, generally keep your eyes and ears open and inspiration will soon strike.

Anyway, I'll be back next month with the concluding bits scattered here and there all over the mag (unless I get fired for writing this boxout), so 'til then...

objects interact with each other would be earth-shatteringly dull. What we need are a few more commands such as LIGHT, UNLOCK, SPRAY CAN, ROW BOAT and the like. This is achieved quite easily. You see, whereas before, all the useable objects in the game used the branch in the USE routine, you can write other object uses in just the same way, except they're branched off from, say, a structured LIGHT routine, so that at the relevant point in the adventure, the program would be waiting input LIGHT LAMP (a real classic of an adventure command if ever there was one).

What?!?

Just to confuse you a little further, I thought it might be worth mentioning extra directions such as UP, and of course, DOWN *(you doink – Dave).*

All around the world I can hear readers spitting their teeth out at the mere thought of adding UP and DOWN directions, but a game with levels *(imagine a text representation of* Bloodwych *for example)* can be so much more atmospheric. Imagine the player's joy when they've nearly mapped every location, and in the final room, they find a ladder leading up to a whole new level.

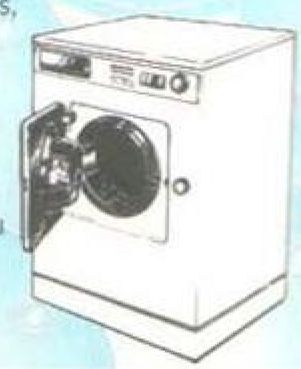


The way you achieve this is simple – all you have to do is add a third dimension to your map so that instead of using just width and length in the array dimension, you use width, length and height. Then you can add UP and, indeed, DOWN commands to heart's content.

Give it a whirl

And so, with that vital titbit of info, our Laundry Adventure is virtually complete. We'll print the complete program next month (either that or slap it on the covertape) for anybody who couldn't work out how to program the bits I've been giving you clues about this month. But it really will help you a lot more if you try to write the remainder of the program yourself before then. After all, the main bulk of the programming has been done for you, so the whole task is a lot less daunting than it was before this series began (I hope).

But that's not the last you'll see of Venture Forth, because I'll be back, dealing with character interaction in detail in the coming months. But I reckon that armed with the info we've given you over the last four months, you're in a position to write a pretty darned *funky adventure of your own already*. So go on, show us what you can do. You never know, you could end up on issue 100's covertape.



Less basic BASIC

I know I'm asking for trouble. I confidently predict that as soon as this issue goes on sale we're going to be deluged with mail and phone calls moaning about the fact that this month I haven't given you the program lines you need to finish the adventure. But it's for your own good, believe me.

The point is not to test you, though. You see, as any programmer will tell you, there are many different ways to solve the same problem. The odds are, there'll be more efficient solutions than the ones I've suggested for the problems that we've faced so far (though I will defend myself by saying that I was trying to keep things simple for the less experienced programmers following this series).

However, things will seriously hot up soon as we take this BASIC programming lark to the next stage. One of the first changes you'll notice in next month's issue will be Type-Ins, which will begin to look more seriously at the actual mechanics of the various programs published. The other major dip into BASIC programming will be be a bit more advanced, as I reveal how you can create interactive characters in adventures using only a CPC, Locomotive BASIC, a washing up bottle, and a copy of *Amstrad Action* (washing up bottle optional).

And, of course, there's always Assembly Line where BASIC lovers can get to grips with just what makes their machine tick.

What more can we say? If there's any call for BASIC tutorials in the future, don't worry – we'll recognise the need and see what we can do to satisfy your appetites.

Technical Forum

You think you've got problems? Then spare a thought for Richard Fairhurst – he gets hundreds of them every month. And they're not even his own. Then again, he gets paid to solve them...

All worked up

I am writing a workbench that can do anything you could ever dream of doing with disks (except copying of course). I am stuck with one thing: BASIC-ly, how do you record the file of a disk catalogue in a string?
Zeth Green, Lowestoft

Mallard BASIC, the close relative of Locomotive BASIC which is supplied with the Amstrad PCW, includes a useful function to do this. Unfortunately, it's missing from the CPC's language, presumably because it was originally designed around a cassette system. There is a way to do it, however.

Whenever a CAT command is issued, the CPC temporarily stores the results in a 2K buffer. If you disable the screen display, do a CAT and then read the results out of the buffer into an array, you'll get a list of files on the disk. Here's a short machine code routine to do it:

```
10 MEMORY &97FF: FOR n=&9800 TO &9854
20 READ a$: POKE n,VAL("&"+a$)
30 NEXT
40 DATA C3,06,98,C3,16,98,CD,57,BB,11,57,98,ED,
53,55,98
50 DATA CD,9B,BC,C3,54,BB,2A,55,98,7E,FE,FF,20,
2B,23,E5
60 DATA DD,6E,02,DD,66,03,36,0C,23,5E,23,56,E1,
01,08,00
70 DATA ED,B0,3E,2E,12,13,01,03,00,ED,B0,DD,5E,
00,DD,56
80 DATA 01,ED,A0,ED,A0,22,55,98,C9,DD,5E,00,DD,
56,01,3E
90 DATA FF,12,13,12,C9
```

When you want to catalogue a disk, type CALL &9800. You can then extract the filenames one-by-one with CALL &9803,@f$,@i% – where i% is a previously defined integer variable, and f$ a previously defined string of at least 12 characters length.

If i% is returned as -1, then there are no more files. Otherwise, a filename will be returned in f$, and the size of the file (in kilobytes) will be returned in i%. To get the next filename, simply call the routine again!

Informer

Hello Richard, Simon, Nick, Tim and whoever else is there (*er, you must mean Dave and Andy – Dave*). Could you please answer these questions?

1 Would it be possible to make an add-on for the CPC that has five gigabytes, two disk drives (new make, very small) storing 10 gigabytes on each disk, a hard drive (big!) and a fast CD-ROM? It would also have its own very fast microprocessor. I'm not joking.

2 I tried your *Big Screen* in the April issue, but the screen memory still sat between &C000 and &FFFF. Parts of the screen were repeated. How can this be fixed?

3 How can you make the screen smaller therefore making the resolution better (*Ikari Warriors* does this)?

4 How come PCs can fit 360K on a 5.25-inch disk while CPCs can only fit less than half that, just 178K?

5 How do you test for an AMX mouse? (Are other mice tested the same?)
Kent Boogaart, Australia

1 Oh yeah, sure it's possible. Just pop down to your local Apple dealer, ask for a Quadra 800, hand over the equivalent of £3,000 in Aussie dollars, and connect it via an RS232 cable to

I've got the power

How can I calculate cube roots and so on on my CPC? BASIC only seems to cater for square roots, and it would be a great help to me in doing my GCSE homework.
Timothy Williams, Ipswich

Simple. A cube root is the same as raising to the power of a third, so to find the cube root of 27, for example, you could type PRINT 27^(1/3). For the eighth root, raise to the power of an eighth (0.125), and so on.

Top Tips

Narmean Array?

Arrays are one of the most useful features of BASIC for the serious programmer. Unfortunately, they're also one of the most memory-hungry: try dimensioning a few 200-element numeric arrays and see how your free space goes down. Not fun.

One way to get around this, if all you want to do is store integers under 255 in the array, is to use strings. A string takes up a lot less memory, but is capable of storing 255 characters – each of which, of course, represents a number between 0 and 255. Simply convert numbers into characters and back again using the CHR$ and ASC functions, and access the correct element with the MID$ function.

ASCing for it

The CAS IN DIRECT (DISC) firmware call is a very good way to read any file directly into memory, fast (after all, that's its job). Except if it's an ASCII headerless file, that is.

You can tell one of these by the filetype 22 returned in A after you've opened the file. Reading it in character by character is no problem. But if you'd like to load the whole lot in at once: no joy.

Well, that's not strictly true. If you want to load an ASCII file, insert this immediately after the file has been opened:

```
push hl
pop ix
ld (ix+65),&FF
ld (ix+66),&00
```

It will then load in using CAS IN DIRECT as if it were a binary file.

What's Un, Doc

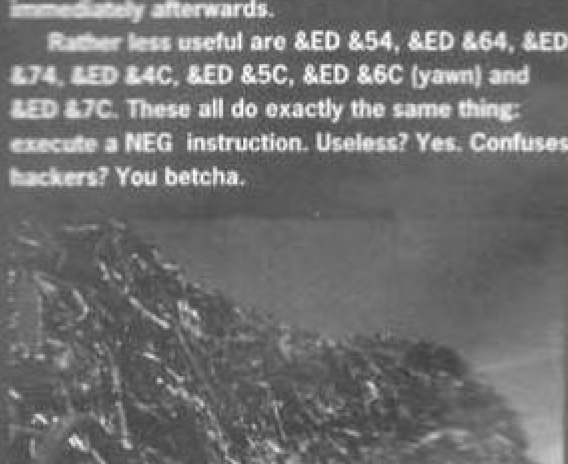
Excellent ways to confuse hackers, no. 673: fill your code with undocumented op-codes, which will confuse their disassembler. What's more, some of them are actually rather useful. Here's a quick summary of the more significant ones:

You know the SLA, SLL and SRL instructions? There is an SLL, too: it appears that Zilog 'forgot' to document it, and it has remained unofficial ever since. In bytes, this translates as &CB &30 (yup, it's a compound instruction) to &CB &37 – comparable to SLA, which is &CB &20 to &CB &27.

How about OUT (C),0? No need to waste a valuable register when sending 0 to an output port, because this instruction does it all-in-one. (For example, if you are concealing the screen by setting the number of columns displayed to 0 – register 1 of the CRTC – it could come in useful.) This translates as &ED &71.

And there's more – &ED &70, another undocumented instruction, acts as IN F,(C): that's right, the input goes to the flags register. A candidate for useless instruction of the year? Surprisingly, no. For routines which need to access chips quickly and directly, such as a test for frame flyback or a tape loader, this instruction is ideal, as it enables a conditional jump or call immediately afterwards.

Rather less useful are &ED &54, &ED &64, &ED &74, &ED &4C, &ED &5C, &ED &6C (yawn) and &ED &7C. These all do exactly the same thing: execute a NEG instruction. Useless? Yes. Confuses hackers? You betcha.



And the winner of the first ever AA Tip Of The Month award goes to this delightful little number in Canterbury. Think your local tip is a winner? Then send us a photo.

your CPC. This isn't quite up to the set-up you describe, I'm afraid, but it's close.

Theoretically, all this would be possible, but it would be extremely difficult and, frankly, pointless. For a start, no Amstrad software is available on CD-ROM, and you don't really need that sort of storage when programs are written for everyone else who has a 178K disk drive. Not worth the effort.

2 The technique definitely works as described (I've just tested it). Check your coding! What might have happened is that, in testing, you've jumped to the routine, returned to the CALLing environment (BASIC or your assembler), and caused the screen to scroll – which will return the screen address to a standard value around &C000.

3 Making the screen smaller is a matter of changing register 1 of the CRTC (usually 40) for the number of MODE 1 columns, and register 6 (usually 25) for the number of character lines. You may want to re-centre it by adjusting register 2 (usually 46) for the horizontal position, and register 7 (default 30) for the vertical.

However, changing the screen dimensions won't alter the resolution – this is a fundamental part of the CPC's hardware, and can't be altered. I think you're mistaken about *Ikari Warriors*.

4 CPCs can fit 360K (well, 356K to be pedantic) on a 5.25-inch disk: you need a double-sided 5.25-inch drive and appropriate DOS software to be able to use it, though. Alternatively, you can buy a 'disk notcher', which makes a hole in the 5.25-inch disk allowing you to flip it over in the same manner as you would 3-inch disks.

5 You can sense the mouse's movement using the JOY(0) function, as you would a joystick.

Mode of operation

I have a few questions about making on-screen text look better.
1 Is there a way of splitting the screen into two different modes so that, say, it is in MODE 2 in the top half, and in MODE 1 in the bottom half?
2 Is there a way of putting a word of one MODE in the middle of a line of another MODE – for example, if you want to emphasise a word in a sentence?
3 Is there a way to print characters into the border space around the normal text area?
Barry Hunter, Blaenau Ffestiniog

1 There sure is, and by a spooky coincidence here's a routine that does it:

```
10 MEMORY &9FFF: FOR n=&A000 TO &A044
20 READ a$: POKE n,VAL("&"+a$)
30 NEXT
40 DATA 18,02,18,1F,DD,7E,00,32,41,A0,DD,7E,02,
32,3C,A0
50 DATA AF,32,45,A0,21,46,A0,11,29,A0,01,00,01,
CD,19,BD
60 DATA C3,E0,BC,21,46,A0,C3,E6,BC,3A,45,A0,3C,
32,45,A0
70 DATA FE,03,28,0C,FE,06,C8,AF,32,45,A0,3E,00,
C3,1C,BD
80 DATA 3E,00,C3,1C,BD
```

To set up a split-mode screen, type CALL &A000,top,bottom – where each number represents the MODE you want in that part of the screen. To turn it off, type CALL &A002.

When you want to change MODE so that you can write to a different part of the screen, instead of issuing a MODE command, POKE the appropriate number into &B1C8 (464) or &B7C3 (other machines)

2 No. Unfortunately, the CPC's hardware restricts MODE changes to the start of each line.

3 Yes, but you'll have to do it in machine code. The technique is known as 'overscan', and is described in the answer to the 'Big Screen' question in April's Techy Forum (and if you haven't got April's issue, you can order a copy using our Back Issues service on page 56).

Scrollin' Thunder

I am using a scrolling message routine written by a friend, which scrolls the top two lines of the screen. However, the second line is out of sync with the first. But if I choose to scroll two lines further down the screen, it works fine. Any ideas?
Name and address withheld

In fact, the author of this letter is the boss of a well-known software supplier, who will remain nameless only if he sends a cheque for £100 to AA Blackmail Department at the usual address.

Your problem, Mr Withheld, is that your routine is executing at the same time as the CPC's hardware is displaying the appropriate portion of the screen. The first bit is fine, but when you get to the second line, the (fast) hardware overtakes your (slow) program, and so the last frame's scroll – ie, one character behind – is displayed instead.

To solve this, you could try speeding the routine up: a good way to do this is to replace the LDIR block copy instruction with the appropriate number of LDIs. So, instead of LD BC,79: LDIR, use 79 LDI op-codes in succession. Alternatively, you could delay the scroll routine so that it executes while the electron beam is further down the frame. A good way to do this is to insert two or three HALT instructions before the scroll code.

Expansion potential

How are RAM expansions made possible? I suspect the RAMDIS line on the expansion port may be responsible in some way for switching out the &4000 to &7FFF block, but I'm probably wrong.
Kevin O'Rourke, Stirling

Right up to a point. The RAMDIS input, when it gets high, does switch out the &4000 to &7FFF block: in fact, it switches out the rest of the internal memory, too. It is used in conjunction with the RAMRD output, which goes low to enable external RAM.

If these were the only lines involved, RAM expansions could be knocked out two-a-penny. Alas, this isn't the case. Some quite complicated circuitry also needs to be employed to monitor the A0-A15 outputs, which describe a memory or I/O address (which is determined by the MREQ and IORQ outputs, going low to indicate a memory or I/O address respectively): you need to act on I/O bank-switching outputs to address &7Fxx with data (D0 to D7) of &C0 to &FF to determine the memory configuration, and then switch memory in or out as required by acting on the addresses provided on lines A0-A15 when MREQ is low.

In short, building a memory expansion isn't a job for the faint-hearted. However, should you come up with a suitable design, we'd love to see it at *AA*. And in response to your first question, not printed here... yes, it is possible: watch this space!

Hardware envelope

In my CPC's manual, there is a curious entry in the description of the ENV command. It states that I can access "hardware envelopes" by using two parameters for an envelope section instead of three. However, when I try to do this, the computer simply replies 'Syntax error'. What is a hardware envelope and how can I access it?
Keith Fellowes, Berwick-upon-Tweed

The reason why you're getting a 'Syntax error' is because of an omission in some editions of the manual for the CPC: what you need to do is place an equals sign (=) in front of the first parameter to indicate that you are using a hardware envelope (why an equals sign, I have absolutely no idea).

Hardware envelopes are a built-in feature of the sound chip which are similar to normal envelope stages (which, in contrast, are implemented by clever programming on Locomotive's part). They are restricted to certain 'shapes': each shape is referred to by a number, which is supplied as the first parameter. The second parameter defines the time over which

the basic part of this shape will be played (the 'envelope period'). The possible shapes are:

1 Fade from maximum volume to silence over the envelope period.

4 Fade from silence to maximum volume over the envelope period, then cut to silence.

8 As shape 1, repeated indefinitely.

10 Fade from maximum volume to silence and then back again, over the envelope period, and repeat indefinitely.

11 As shape 1, then cut to maximum volume.

12 As shape 4, repeated indefinitely.

13 Fade from silence to maximum volume over the envelope period, and stay at maximum volume.

14 Fade from silence to maximum volume and back to silence over the envelope period, and repeat indefinitely.

Finally, note that only one hardware envelope can be sounding at any one time.



Some survival hints for anyone who needs to seek help from Technical Forum:

1 Mark your envelope Technical Forum, otherwise, it'll miss the huge jiffy bag of letters that makes its way from AA Towers to the Independent Republic of Rutland every month – I'm only a humble freelancer, you see. If you want to write to Reaction or Cheat Mode too, send a separate letter (although if the letter says, "I think Richard should be given a 200 per cent pay rise" it'll probably get passed on).

2 Read through previous Techy Forums to see if your question has been answered already.

3 Please don't ask, "Why won't my printer work with *Advanced Art Studio*?" or similar questions. Although there aren't many CPC questions we can't cope with, it's asking a bit much to expect us to know everything about every printer ever made. Check your manual.

4 We don't have the time to answer letters personally, so please, no SAEs.

Remember, no question is too simple or too difficult – write anyway: it can't do you any harm! The address, as usual, is Technical Forum, *Amstrad Action*, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW.

That's it for another month – I'm off to work on a horribly complicated program. Why is it that bugs in your own code are always so much trickier to find than those in other peoples'...?

Da doo ROM ROM

I picked up a second-hand 6128 with colour monitor for £100, from an ad in the local paper. However, some games refuse to run on it, even though they work perfectly with my mate's 6128 with green monitor. I have also noticed that my computer has a different sign-on message to his; mine mentions 'MAXAM' and 'ROMDOS'. A few boxes are hanging off the back of the computer, could these be causing the problem?
Mark Piper, Huntingdon

Your diagnosis is pretty much right: it is the fault of the 'boxes' on the back of the computer. One or more of them is a ROM-box, which contains programs ready for call-up when you switch on your computer. These programs take up memory which can cause some games to complain.

You have two alternatives. The first, and easiest, is to disconnect the ROM-box from the back of the computer (while it's switched off, of course). The second, again while your CPC is switched off, is to open up the ROM-box – it should just be a matter of removing a few screws – and locating a small set of switches (some ROM-boards don't have these, in which case there's not a lot you can do). Flick them all to the opposite position: the ROMs inside the ROM-box are now turned off.

Hidden agenda

Many machine code loaders, I have observed, POKE their code in strange places: &AF00 and &BE80 being two of the most common. I always thought that these were located in BASIC and operating system workspace. How come you can get away with putting short routines here?
D Wilson, Port Talbot

They are located in workspace – &AF00 is in BASIC workspace, &BE80 in operating system workspace. However, it's a fairly safe bet to assume that they won't be used. &AF00 is meant to be a part of the BASIC stack, the list where it keeps details of FOR... NEXT loops, GOSUBs and such like, but you're unlikely to have so many nested loops and subroutine calls that the stack ever reaches this far up. It's a similar story in the case of &BE80. This is the main Z80 stack, which works downwards from &C000. It very rarely extends below about &BF70, which leaves a decent amount of space. However, beware. ROMDOS and ROMDOS XL claim this memory for their own – the source of many an incompatibility.

In fact, on tape-based systems, you can use the area from &BE00 for your own code. AMSDOS, though, uses the workspace from &BE00 to &BE80 to store numerous variables. Incidentally, a useful one is stored in the two bytes from &BE7D: the start of the disk ROM's workspace. If the usual POKE &A701,229 trick doesn't work for unerasing files, because you have sideways ROMs above slot 7, then you can find out the address from &BE7D, add 1, and POKE 229 there instead.

MPs for hire

What's the difference between an MP-1, an MP-2 and an MP-3? Which one do I need to get my 6128's output to appear on my telly? What else can I buy?
Sally-Anne Ericson, Manchester

The MP-1 was the original Amstrad unit to convert the 464's monitor output into a TV signal. As the power for CPCs is usually supplied by the monitor, it had to supply this as well. When the 664 and 6128 came along, they required extra power to run the disk drive, so the MP-2 – a new version capable of powering the 12V socket in disk-based CPCs – was released. This is the one you need.

The MP-3 is a different kettle of fish altogether (*the MP-3 is a different kettle of fish – Dave, Simon and Richard altogether*): instead of giving you computer pictures on your TV, it gives you TV pictures on your monitor. The quality is surprisingly good, and it's cheaper than buying yourself a new colour TV. (The unit was originally designed as part of an Amstrad promotion – the CPC Home Entertainment Centre – but, like most of their 8-bit activities in the last seven years, it flopped badly.)

The main alternative, at the moment, is Campursoft's *Videomaster*. See *AA88* for a full three-page review (*er, have I mentioned Back Issues on page 56? – Dave*). Yes.

Obvious space-filler

How do I write a patterned fill routine on the 464 for a machine code art package I am writing? I have been trying to do this for weeks and I'm completely stuck. Please don't tell me to use the FILL command – the 464 doesn't have it and it doesn't do patterned fills anyway.
Steven Laing, Glasgow

Okay. A complete source code listing would take up too much space, but here's how you'd program one. First of all, you need a fill algorithm, which simply fills in the area required. A simple algorithm would move up from the starting point until it encounters an ink different to that at the starting point, or the top of the screen. You would then work down the screen, filling every line, until either the bottom of the screen or an ink different to that at the starting point is encountered. Each line is filled in a similar fashion: search to the left until the edge of the screen or a different ink is encountered, then plot pixels continuously to the right until (you guessed it) the edge of the screen or a different ink is encountered.

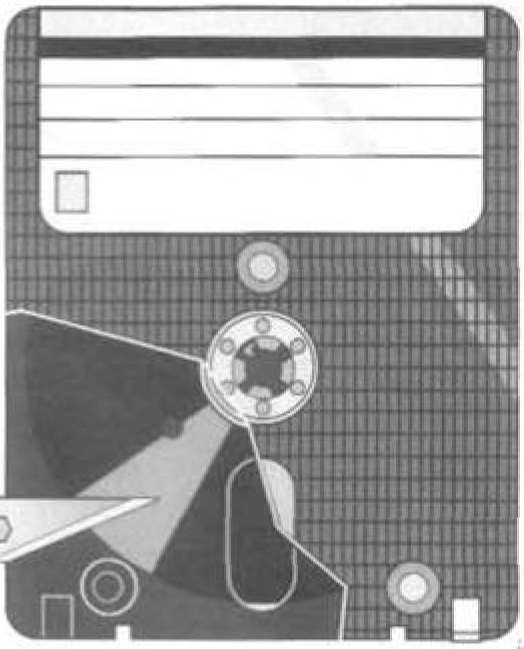


An obvious, but nevertheless topical space filler. Should sell a few extra copies.

So far, so good. But how do you go about turning this into a pattern fill? You need a sprite in memory which contains your pattern, and to determine which ink is plotted at any point in the fill, then wipe out the high order bits of the x- and y-coordinates in question until you have a coordinate within the sprite. Then convert this to an address within the sprite data, and test the appropriate bit.

One note of caution: you'll need a different routine for each screen mode, to take account of the horizontal increment between pixels (1 in MODE 2, 2 in MODE 1, and 4 in MODE 0). This will alter your routine both in the horizontal filling code and the sprite address conversion.

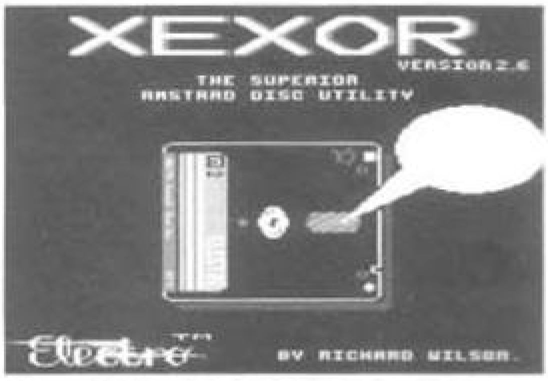
Xexor



Okay, it might sound like a detergent, but this all-in-one disk utility could change the way you program forever. Simon finds out if he'd swap it for his old brand.



Probably one of the hardest things I've ever had to write is this review. To be honest, it's hard to know where to start. You see, I've used a lot of disk utilities in my time (I've written a fair few as well), but never before have I seen a piece of work that's so comprehensive.



Xexor. So how the heck are we gonna pronounce it? Zecksor? Chsecksor?

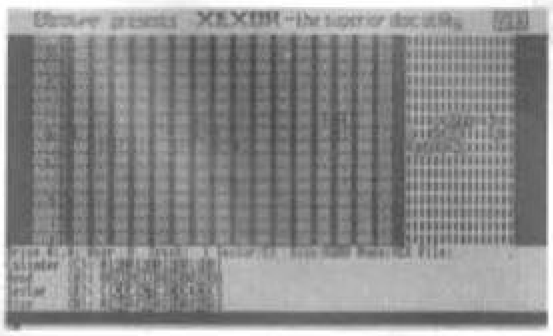
A lot of people will tell you that the one thing you really need in order to keep your disk system running like clockwork is a suite of disk utilities, comprising the following essentials:

● A formatter

Formatters are essential. What more can I say? (*About another six lines' worth – Dave.*) When you buy a box of blank disks, whether 3-inch or 3.5-inch, you'll need to prepare them for use on a CPC. This process is known as formatting. CP/M provides this function, but in a very long-winded and incredibly user-unfriendly way.

● A file manager

A file manager is a package that'll take care of all file copying and attribute needs you may have. The copying side is pretty self-explanatory, but attributes are a bit more of a problem. You see, files don't just sit on a disk – they can have many attributes, such as whether or not they're visible to the user when the disk is catalogued, which user area they're placed in and whether or not they can be erased.



Zezor? It's got a complete sector editor and everything! I know, how about Zecksor?

Attributes such as visibility (invisible files are known as system files) and write protections are incredibly difficult to set and change from within AMSDOS alone. The only method outside buying a specialist disk package is to load CP/M (the extra disks provided with the machine on purchase), and use utilities such as *PIP*. However, with CP/M being the antiquated beast it is, and loading times (on disk, remember) taking what seems like another ice age, the solution is far from perfect.



Of course, we could always assign yet another phoneme to the letter Z...

● A copier

As well as occasionally copying single files, you'll sometimes need to make copies of entire disks. There are many copiers around (indeed, CP/M comes with one), but there aren't that many that deal with strange sector identities and such like. And trust me, you'll occasionally need one!

● An Editor

Editors aren't so essential (*pardon? – Dave*). Nor are they all that useful to your average disk user, but every now and again you will come across the need for one. A sector editor (an editor) is a program that allows you to go through the disk byte by byte, and look at the information as it's stored on the disk, as opposed to loading in each individual file and examining it that way, suffering the traumas of such things as protection systems.

The all-in-one solution

But why take four utility packages into the shower? *Xexor* does all these functions. It serves every single need listed, and it serves them well. On boot up, you are presented with a command line which you use to tell the package exactly what you want it to do (rather like BASIC). If you can't get along with that kind of input system, though, you can use the menu system.

As for user friendliness, each command is fully documented in a structured and intelligent Help system, which provides easy access to full instructions for every single command.

As if that wasn't enough, *Xexor* also provides another useful feature – ROMs. There is a command in the package that provides a ROM image. This is a 16K file that can be blown on to an EPROM using a blower, and inserted into either a ROM board, or in place of your machine's internal AMSDOS ROM.



But seeing as this is a magazine, you won't be able to hear them anyway! Hector?

Convention dictates that a good review has to highlight some bad points as well as all the good ones. Well, I tried hard, but I really couldn't find any major gripes. The only possible fault is incompatibility with ROMDOS, but *Xexor* provides its equivalent in the form of a ROM anyway (*which, I get the feeling, STS may be producing* separately pretty soon, for all those who don't have access to a ROM-blowing system).

The only shame is that this package didn't appear two months ago, as it would have quite easily scooped the Sugar awards for Disk Utilities and DOS Systems. Belated congratulations, STS.



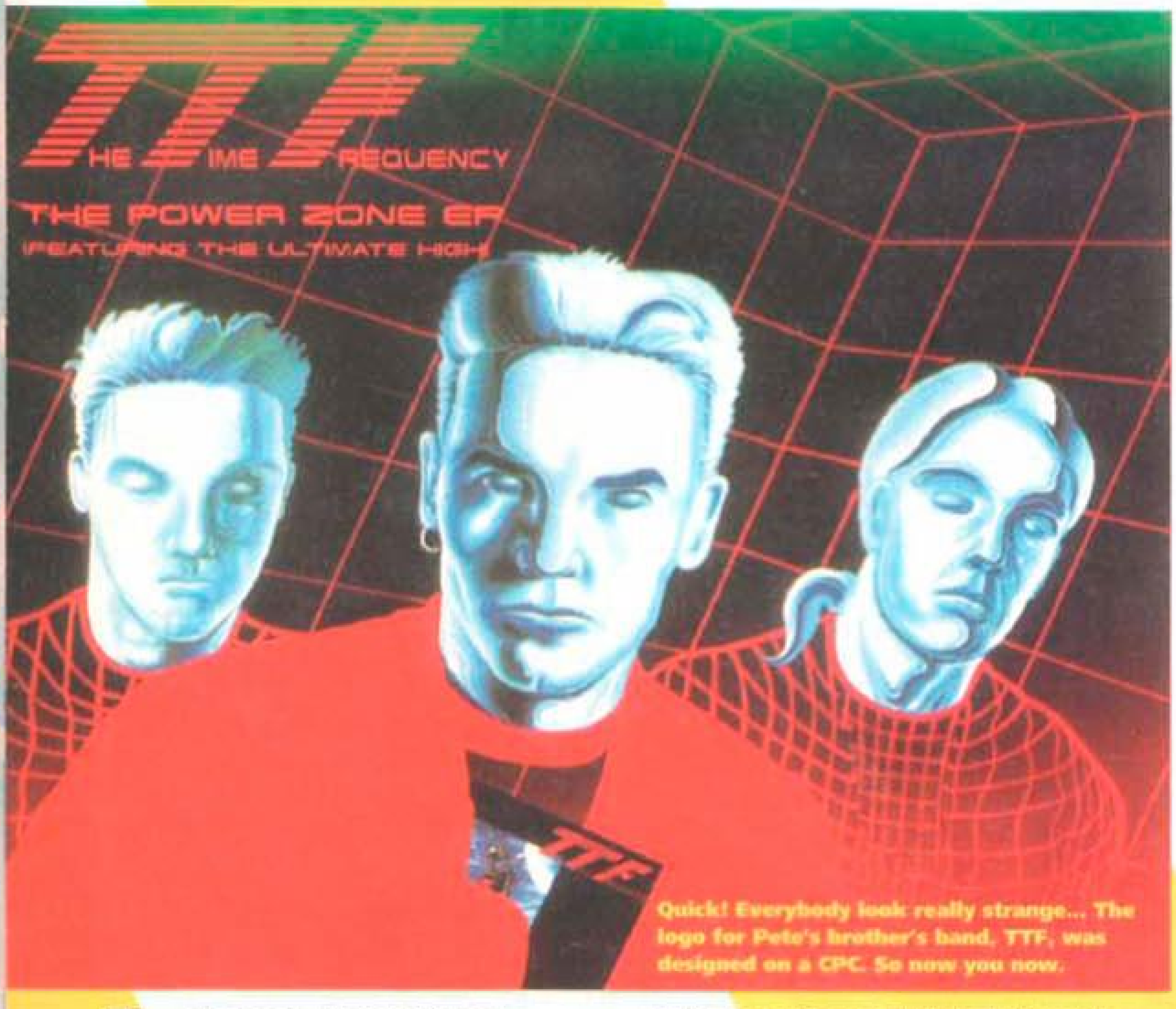
I'd just like to say it's been a pleasure writing these captions – a real joy.

Contact

To get hold of a copy of *Xexor*, send £20 along to the boys at: STS/Sheepsoft, 39 Woodlands Road, Barry, South Wales CF6 6EF.

Carry On Campursoft

There aren't many companies around today that are more serious about serious software and hardware for the CPC than Campursoft, so Simon went to find out all about them.



Quick! Everybody look really strange... The logo for Pete's brother's band, TTF, was designed on a CPC. So now you now.

Let's face it – there aren't many organisations around that are actively developing CPC software and hardware in large quantities any more. If you want to buy serious software these days, you're limited to only a few dedicated companies. One such company is the joint venture of Peter Campbell and Jess Harpur – Campursoft.

Grass Roots

This story begins with a user group I'm sure we've all heard of many times before – WACCI. Peter and Jess were (and still are) members of WACCI who realized that as other larger companies pulled out, there was a definite niche in the market for a small, dedicated company that developed its own software. And lo, Campursoft was born. Well, there was another ingredient – *Micro Design.*

When Peter Campbell first got his CPC, he also invested in a copy of *Micro Design*. Being completely computer illiterate at first, the unfriendly manual combined with the complex program stumped him, and *Micro Design* confined to a drawer for three months. This was not to last, however, because once Peter started to pick up the basics of the CPC, he took another look, and found he absolutely adored *Micro Design*, the package that was to start Campursoft.

You see, *Micro Design*, though adequate for many uses, could have done a lot more. This was where Jess came in. Being an experienced CPCer with a high level of technical knowledge, he secretly started work on an upgrade. Though no-one was willing to let them officially develop it, Creative Technology (who had dropped the CPC entirely) were happy to let them upgrade it privately with a view to sale. Three months later, Campursoft bought the rights to the package outright.

Programmers

Campursoft are always very happy to receive software with a view to selling it. So if you've just written something (serious or otherwise), and are looking to reach the masses through a reliable software house, contact Campursoft. They pay 50 per cent of their total profit, which is, incidentally, way above the industry standard.

What Next?

So, a new software house was on the road. What next? Well, there was a company called Moonstone Computing at around that time, which, as far as the CPC was concerned, had one main claim to fame – *2 in 1*. This was a package that allowed 3.5-inch drive owners to read from and write to PC format disks (among other things).

Campursoft's involvement in *2 in 1* started with Peter visiting the Moonstone office and buying copies to re-sell through Campursoft. Shortly after, though, they bought the rights to manufacture copies, adding another product to the Campursoft range.

Plans

So what's for the future? Well, as luck and timing would have it, the boys are just about to release quite a bit of new stuff. You'll have read the reviews of *ProPrint* and *Micro Design 2* last issue. But this isn't all they've got planned.

Coming your way soon should be a desktop system, developed by one Michael Beckett (the author of a lot of quality PD software). If the system works, the CPC should be revolutionised with a GUI (graphical user interface) on power up. The software will be on ROM, you see, and so won't need loading from disk each time the machine is reset. If all goes well, we should have a review of that at some point in the near future.

Hardly driven

One way or another, it seems as if things got a little confused in our Campursoft's hard drive review last month. To clarify things it is not currently available. The project is still in the final stages of development, and not yet fully completed. We'll keep you posted...

Hardware

On the hardware side, there are three major products either completed or imminent. First, there's *Videomaster*, reviewed in issue 88, which fills the need for a modulator (Amstrad stopped making them aeons ago). These may possibly be bundled with a video titling system in future.

More impressively, though, is their hard drive, which, at the time of writing, is very near to completion – they've got it running successfully under AMSDOS, but CP/M compatibility is proving to be a little bit of a problem. The drive should be released on to the market later on this year, and should prove invaluable to a lot of programmers, bulletin board owners, PD freaks, etc. Rest assured we'll have a review of some sort for you as soon as possible.

For the slightly more innovative user, Campursoft may be looking into a great new

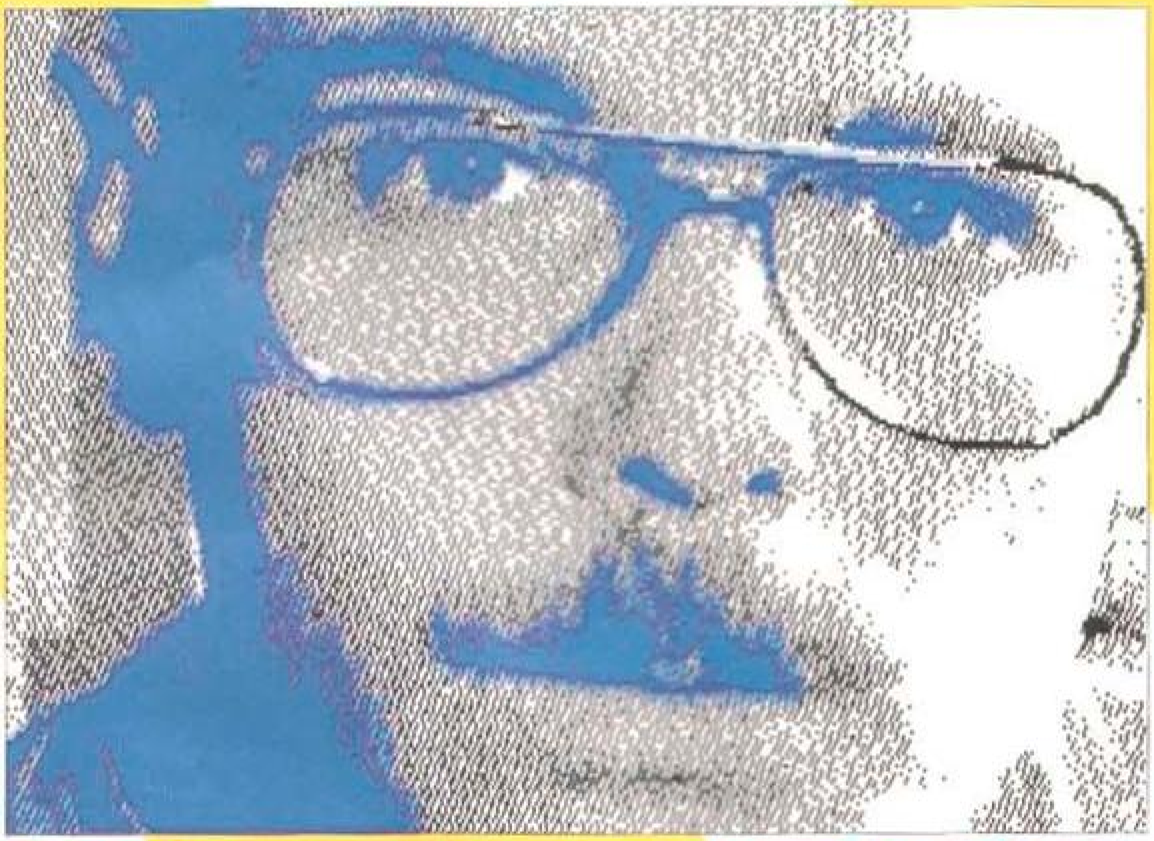
CampurFacts

There are a few more things you really should know about Campursoft:

- They own 16 CPCs across the country.
- A third person who was involved in the beginning, Peter Cresole, is now the producer of *Horizon*, the BBC series.
- Peter's brother's band, TTF, was recently at number 20 in the charts. Their logo was designed on a CPC with *MD2*, then scanned onto a Mac to add colour, effects, etc.
- 'Campursoft' is actually ancient Nordic for 'hairy shoulders'. *(Are you sure about this, Simon? Ed)*
- They can be found at the All Formats Fair under the WACCI banner.
- They're quite happy to sell worldwide, and welcome international contacts.

form of data storage – videotape. In a sense, it's very like the normal cassette tape idea, but using videotape allows you to store 4MB in just 2 minutes and 45 seconds (due to videotape being a lot wider). This means you could store a normal floppy disk in just 65 seconds. Though this won't be as useful as a normal disk, it's said to be incredibly reliable, and should allow the user to archive over 400 disks on to one eight-hour VHS cassette (a four-hour tape in a long-play video).

Campursoft's hardware expertise comes, incidentally, from one Steve Hammond who, though not a full partner in the company, deals with all hardware developments.



Holy...! Oh, it's a digitised picture of the man himself, Peter Campbell. It's a bit of a scary way to take a photo if you ask me, but that's CPC fans for you and this is a good use of one.

Cartridges

Now things really hot up. Campursoft have recently been taking a look at the possibility of releasing software on cartridges (the type used by the Plus range). This involves having a cartridge that, as well as containing BASIC, contains, say, a word processor (instead of *Burnin' Rubber*). The possibilities here are endless, as, if you think about it, you wouldn't even need a ROMboard to use instant software!

A Bit Of A Blow

Life isn't all fun, though. As you may or may not already know, a computer supply company recently closed. Though this spells bad news for the computer scene in general (MJC didn't just supply the CPC market), Campursoft didn't get away too lightly either. They'd been selling *MD2* mainly through MJC, and so lost a major outlet for their products. Fear not, though, as they're looking to find another mail order company in the near future. One possible outlet is OJ Software, but nothing's decided as yet.

Rave On

So, now you know. Campursoft is a company set up by CPC users for CPC users. And they're sticking around, too – "The future of serious software on the CPC is rock solid". And with their products receiving ratings like 91 per cent (*Videomaster*), and comments like, "a nicely-written, easy to use, and incredibly powerful piece of work" (***AA***'s review of *ProPrint*), the quality of future releases looks to be rock solid as well.

Contact

Campursoft, 16 Slatefield Street, Gallowgate, Glasgow G31 1UA ☎ 041 554 4735

Stop Press!

News has just reached us that Campursoft will be releasing a hand scanner later on this year. This is a handy little device that you can run over a picture, photo or whatever, and render an image of it on your CPC. More news on that as we get it.

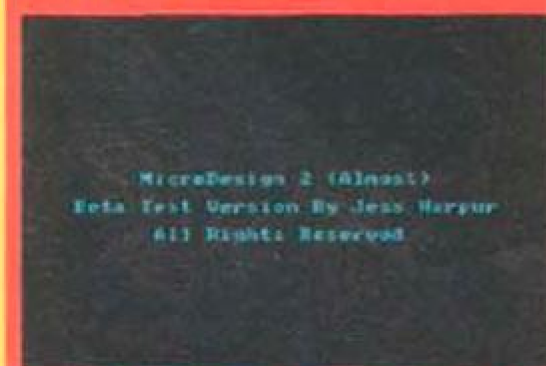
Micro Design 2

The package that started Campursoft is not being ignored. They're currently looking into supplying it on both types of disk (3-inch and 3.5-inch) and both types of format on high density disks (ROMDOS or AMSDOS). You'll also be able to buy *MD2* on cartridge in future.

Other possible developments will be a 256k expansion pack optionally bundled with the package (allowing a better quality of page to be produced more easily), and file converters for IFF and PCX files. This will give clip art fans a huge range of PC and Amiga clip art to benefit from in addition to their own.



We only reviewed it a few months back (well, Tim did), and we loved it. So flick back to issue 94 and have a read.



You can always trust an art editor to pick the unlikeliest grabs. (Oi, these were the ones you supplied me with – Andy.)



(Always remember who's in real control around this place, Hairy, as I have been known to fiddle with the odd Power Up photo, boyo – Andy) Er, great grab.



(Personally, I think we're forgetting who's really in control around these parts – Dave) (Oh yeah?- Publisher) (Ahem! – Managing Director) Cripes! – Simon.

Type-Ins

Come on, you lazy lot. It's about time you did a bit of the hard work. So here are some listings Simon's sorted out for you. Type 'em in, get 'em running and feel all sort of warm inside.

CATPrint

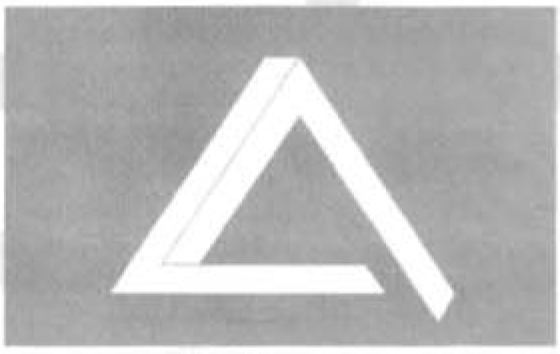
First, a wonderfully useful program by William Hales that'll dump disk catalogues to a printer.

```
OAPM 1·'·Catprint·-·catalogues·discs·to·print
     er
GAJE 2·'·(c)·William·Hales
EANF 3·'·October·1992
JCIC 10·MODE·2:PRINT"Please·insert·disc·to·be
     ·catalogued,·check·printer·is·on-line,·t
     hen·press·any···key·to·continue...":CALL
     ·&BB18
IAMK 20·PRINT#8,CHR$(27);CHR$(126);CHR$(49);
EAAF 30·CLS:|DISC:CAT
DAML 40·FOR·y=1·TO·25
DANL 50·FOR·x=1·TO·80
IAEO 60·LOCATE·x,y:PRINT#8,COPYCHR$(#0);
GACG 70·NEXT·x:PRINT#8,CHR$(13)
DABH 80·NEXT·y:END
```

Penrose Triangle

Ol' Halesey's back, with a program to print a Penrose Triangle, a strange and impractical thing that can't exist in real space. Warning is due though – it's 6128 only:

```
IALA 1·'·The·Penrose·Triangle
GAJE 2·'·(c)·William·Hales
EANF 3·'·October·1992
FACE 10·MODE·1:DEG:flag=0
GAJF 20·INK·0,1:INK·1,24:BORDER·1
HAIJ 30·PAPER·0:PEN·1:GRAPHICS·PEN·1
CAML 40·GOSUB·710
GDJN 50·PRINT:PRINT"The·penrose·triangle·is·a
     n·impossible···object·(i.e.·cannot·be·co
     nstructed·as·a·three·dimensional·object)
     ,·based·on·the·equilateral·triangle."
LAJJ 60·PRINT:PRINT:PRINT"Would·you·like:-"
PAHJ 70·PRINT:PRINT·SPC(3)"1)·Med-res·mode·1·
     in·4·colours·?"
GALI 80·PRINT:PRINT·SPC(3)"or"
NAEO 90·PRINT:PRINT·SPC(3)"2)·Hi-res·mode·2·o
     utline·?"
DAPB 100·i$=INKEY$
EAEK 110·IF·i$="1"·THEN·140
EAJK 120·IF·i$="2"·THEN·260
CAOJ 130·GOTO·100
CBBO 140·CLS:GOSUB·710:PRINT:PRINT"Which·colo
     urs·would·you·like·?"
IANE 150·PRINT:PRINT·SPC(3)"1)·Blues"
IAIL 160·PRINT:PRINT·SPC(3)"2)·Greens"
HAEO 170·PRINT:PRINT·SPC(3)"3)·Reds"
DAHC 180·i$=INKEY$
DABC 190·i=VAL(i$)
FAKP 200·IF·i<1·OR·i>3·THEN·180
FAMG 210·ON·i·GOTO·230,240,250
CAGK 220·GOTO·180
IAMA 230·INK·1,1:INK·2,2:INK·3,4:GOTO·360
IACI 240·INK·1,9:INK·2,18:INK·3,19:GOTO·360
IAGE 250·INK·1,3:INK·2,6:INK·3,15:GOTO·360
NACJ 260·CLS:GOSUB·710:PRINT:PRINT"Would·you·
     like:-"
LADN 270·PRINT:PRINT·SPC(3)"1)·Yellow·on·blue
     ·?
GANL 280·PRINT:PRINT·SPC(3)"or"
LACN 290·PRINT:PRINT·SPC(3)"2)·White·on·black
     ·?"
DABC 300·i$=INKEY$
EAIK 310·IF·i$="1"·THEN·340
EALK 320·IF·i$="2"·THEN·350
CACK 330·GOTO·300
MANK 340·MODE·2:flag=1:BORDER·1:INK·0,1:INK·1
     ,24:GOTO·360
MAOK 350·MODE·2:flag=1:BORDER·0:INK·0,0:INK·1
     ,26:GOTO·360
BALJ 360·CLS
FAMH 370·IF·flag=1·THEN·390
EAJP 380·BORDER·13:INK·0,13
CAEP 390·GOSUB·710
DAML 400·ORIGIN·100,30
FAMP 410·MOVE·20,INT(20*TAN(60))
CAEM 420·DRAW·40,0
CAFP 430·DRAW·400,0
GAIE 440·DRAWR·20,INT(20*TAN(60))
DAPH 450·MOVER·-400,0
GAPF 460·DRAW·200,INT(180*TAN(60))
DALB 470·DRAWR·40,0
GAOC 480·DRAW·420,INT(20*TAN(60))
DADI 490·MOVER·-400,0
DAGE 500·DRAWR·320,0
GAFN 510·DRAWR·-121,INT(101*TAN(60))
FAOP 520·MOVE·20,INT(20*TAN(60))
DABC 530·MOVER·40,0
GAOL 540·MOVER·180,INT(160*TAN(60))
HAMA 550·DRAWR·-160,INT(-140*TAN(60))
DACF 560·DRAWR·236,0
DADA 570·MOVE·400,0
GACO 580·DRAWR·-160,INT(140*TAN(60))
GADD 590·DRAW·124,INT(40*TAN(60))
FACH 600·IF·flag=1·THEN·640
EAPN 610·MOVE·100,20:FILL·1
EAEO 620·MOVE·100,50:FILL·2
EAGO 630·MOVE·400,20:FILL·3
BBNG 640·LOCATE·1,25:PRINT"Press·'B'·for·BASI
     C,·or·'C'·to·continue"
DAJC 650·i$=INKEY$
GAKM 660·IF·UPPER$(i$)="B"·THEN·690
JALK 670·IF·UPPER$(i$)="C"·THEN·CALL·&BB18:RU
     N
CACL 680·GOTO·650
LAGL 690·BORDER·1:INK·0,1:INK·1,24:PAPER·0:PE
     N·1:MODE·1
BAOI 700·END
HACD 710·n=10:IF·flag=1·THEN·n=30
KAHM 720·PRINT·SPACE$(n);"THE·PENROSE·TRIANGL
     E"
JAPL 730·PRINT·SPACE$(n);"===·========·=======
     ="
CALJ 740·RETURN
```

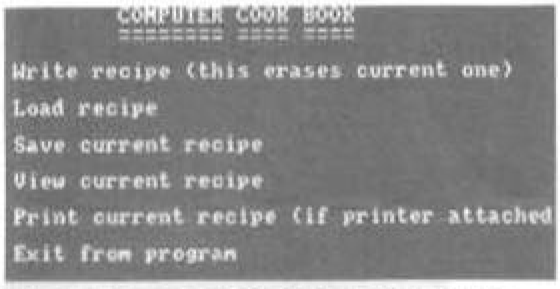


The Penrose Triangle can't exist, apparently – a bit like Dave's stomach which must exist in another universe the amount he eats.

Computer Cookbook

William Hales goes for the hat trick, with a computerized cook book! Wow, huh? It's disk only, so tough luck, tape owners:

```
HAOG 10·'·Computer·Cook·Book
HAGH 20·'·By·William·Hales·1993
HALH 30·'·for·Amstrad·Action
HACP 40·'·*****·SAVE·BEFORE·RUNNING·*****
IAIF 50·'·***·LEAVE·REM·STATEMENTS·IN·***
DAMP 60·ON·BREAK·CONT
FAPA 70·ON·ERROR·GOTO·1340
CAHC 80·|DISC
LAAI 90·INK·0,1:INK·1,24:BORDER·0:PAPER·0:PEN
     ·1:MODE·2
GADH 100·DIM·ing$(30),meth$(30)
BAEJ 110·CLS
BBLB 120·PRINT·SPC(31)"COMPUTER·COOK·BOOK":PR
     INT·SPC(31)"========·====·===="
EBIH 130·PRINT:PRINT·SPC(20)"1.·Write·recipe·
     (this·erases·current·one)"
KAOJ 140·PRINT:PRINT·SPC(20)"2.·Load·recipe"
NACN 150·PRINT:PRINT·SPC(20)"3.·Save·current·
     recipe"
NAAO 160·PRINT:PRINT·SPC(20)"4.·View·current·
     recipe"
GBGB 170·PRINT:PRINT·SPC(20)"5.·Print·current
     ·recipe·(if·printer·attached)"
NAEB 180·PRINT:PRINT·SPC(20)"6.·Exit·from·pro
     gram"
LABJ 190·PRINT:PRINT"Please·type·number·:"
EAAD 200·i=VAL(INKEY$)
FAHP 210·IF·i<1·OR·i>6·THEN·200
FACN 220·LOCATE·21,16:PRINT·i
IAPD 230·ON·i·GOSUB·250,410,640,840,990,1300
CABK 240·GOTO·110
FABK 250·'·Write·recipe
ABOD 260·CLS:INPUT"Please·enter·recipe·name·:
     ·",recname$
DCKH 270·CLS:PRINT"Please·input·ingredients,·
     pressing·RETURN·after·each·one.·Type·END
     ·when·you·havefinished."
BACK 280·z=1
CAIE 290·PRINT
EAAJ 300·INPUT·ing$(z)
GANO 310·IF·ing$(z)="END"·THEN·330
EAIC 320·z=z+1:GOTO·300
EAJF 330·ingnum=z-1
CCHF 340·CLS:PRINT"Please·input·method,·press
     ing·RETURN·after·each·step.·Type·END·whe
     n·you·have···finished."
BAAK 350·z=1
CAGE 360·PRINT
FAHA 370·INPUT·meth$(z)
HACC 380·IF·meth$(z)="END"·THEN·400
EAGH 390·z=z+1:GOTO·370
CABO 400·methnum=z-1:RETURN
FAEB 410·'·Load·recipe
EBBJ 420·CLS:PRINT"Press·C·to·catalogue·disc·
     or·space·to·continue."
NCCC 430·IF·UPPER$(INKEY$)="C"·THEN·CLS:CAT:C
     LEAR·INPUT:PRINT"Recipe·files·have·the·R
     EC·extension":PRINT:PRINT"Press·any·key·
     to·continue":CALL·&BB18:GOTO·450
FAPO 440·IF·INKEY$<>"·"·THEN·430
PADN 450·CLS:PRINT:INPUT"Please·enter·filenam
     e·:·",file$
LAJB 460·IF·LEN(file$)<1·OR·LEN(file$)>8·THEN
     ·410
GAHF 470·file$=file$+".rec"
MADC 480·PRINT:PRINT"Press·any·key·to·load."
FADO 490·WHILE·INKEY$="":WEND
EACG 500·OPENIN·file$
FAMF 510·INPUT#9,ingnum
```



We tried to get Delia Smith to endorse this program but she was out to lunch at the time.

```
FANM 520·INPUT#9,methnum
FAPM 530·INPUT#9,recname$
GAJB 540·FOR·z=1·TO·ingnum
EAPP 550·INPUT#9,ing$(z)
CAEJ 560·NEXT·z
GAMI 570·FOR·z=1·TO·methnum
FACH 580·INPUT#9,meth$(z)
CAHJ 590·NEXT·z
CADM 600·CLOSEIN
ABDO 610·PRINT:PRINT"Recipe·loaded,·any·key·t
     o·continue."
FAON 620·WHILE·INKEY$="":WEND
CAJJ 630·RETURN
FAIC 640·'·Save·recipe
OAOA 650·CLS:INPUT"Please·enter·filename·:·",
     file$
GAON 660·IF·LEN(file$)>8·THEN·640
JAGO 670·PRINT:PRINT"Any·key·to·save."
FAEO 680·WHILE·INKEY$="":WEND
GALF 690·file$=file$+".rec"
EAFM 700·OPENOUT·file$
FAJF 710·WRITE#9,ingnum
FAKM 720·WRITE#9,methnum
FAMM 730·WRITE#9,recname$
GALB 740·FOR·z=1·TO·ingnum
EAMP 750·WRITE#9,ing$(z)
CAGJ 760·NEXT·z
GAOI 770·FOR·z=1·TO·methnum
FAPG 780·WRITE#9,meth$(z)
CAJJ 790·NEXT·z
DAGC 800·CLOSEOUT
ABPI 810·PRINT:PRINT"Recipe·saved,·any·key·to
     ·continue."
FAAO 820·WHILE·INKEY$="":WEND
CALJ 830·RETURN
FAGD 840·'·View·recipe
PAEJ 850·CLS:PRINT·recname$:PRINT·STRING$(LEN
     (recname$),"=")
JAJE 860·WINDOW#1,1,40,4,25:WINDOW#2,41,80,4,
     25
XAJJ 870·PRINT#1,"INGREDIENTS":PRINT#2,"METHO
     D"
JAKK 880·PRINT#1,"===========":PRINT#2,"=====
     ="
EAOL 890·PRINT#1:PRINT#2
GAJB 900·FOR·z=1·TO·ingnum
EAEP 910·PRINT#1,ing$(z)
CAEJ 920·NEXT·z
GAMI 930·FOR·z=1·TO·methnum
FAIG 940·PRINT#2,meth$(z)
CAHJ 950·NEXT·z
OAKP 960·LOCATE·1,25:PRINT"Press·any·key·to·c
     ontinue."
FAGO 970·WHILE·INKEY$="":WEND
CABK 980·RETURN
FAOK 990·'·Print·recipe
FBLE 1000·CLS:PRINT"Please·check·that·the·pri
     nter·is·ready·to·print."
MAHE 1010·PRINT"Press·any·key·to·continue."
GAJA 1020·WHILE·INKEY$="":WEND
FAIB 1030·printflag=0
FAIP 1040·PRINT#8,recname$
XACC 1050·PRINT#8,STRING$(LEN(recname$),"=")
CAPM 1060·PRINT#8
KAIE 1070·PRINT#8,"INGREDIENTS";TAB(40)"METHO
     D"
JAJF 1080·PRINT#8,"===========";TAB(40)"=====
     ="
CACN 1090·PRINT#8
JANI 1100·IF·ingnum>methnum·THEN·1200
MAPP 1110·IF·ingnum=methnum·THEN·printflag=1
GAEE 1120·FOR·z=1·TO·ingnum
JAKI 1130·PRINT#8,ing$(z);TAB(40)meth$(z)
CAPL 1140·NEXT·z
IADA 1150·IF·printflag=1·THEN·1260
MAAE 1160·FOR·z=methnum-ingnum·TO·methnum
HAGC 1170·PRINT#8,TAB(40)meth$(z)
CADM 1180·NEXT·z
DANA 1190·GOTO·1260
GADL 1200·FOR·z=1·TO·methnum
JAJI 1210·PRINT#8,ing$(z);TAB(40)meth$(z)
CAOL 1220·NEXT·z
LAOM 1230·FOR·z=ingnum-methnum·TO·ingnum
FAIC 1240·PRINT#8,ing$(z)
CABM 1250·NEXT·z
KANB 1260·PRINT:PRINT"Recipe·printed."
OAGB 1270·PRINT:PRINT"Press·any·key·to·contin
     ue."
GABB 1280·WHILE·INKEY$="":WEND
CAMM 1290·RETURN
FAGO 1300·'·Quit·program
KAAL 1310·CLS:INPUT"Are·you·sure?·(Y/N)·",q$
IAJE 1320·IF·UPPER$(q$)="N"·THEN·RETURN
CAFM 1330·|BASIC
GAOL 1340·'·Error·trapping
KAFH 1350·IF·DERR<144·OR·DERR>148·THEN·RESUME
     ·110
JACL 1360·ON·DERR-143·GOTO·1370,1420,1450,148
     0,1510
MAAE 1370·PRINT:PRINT"Possible·errors·are:-"
BCMH 1380·PRINT:PRINT"The·filename·is·incorre
     ct·-·punctuation·or·spaces·are·not·allow
     ed·in·filenames."
LANK 1390·PRINT:PRINT"The·disc·is·missing."
DAPE 1400·GOSUB·1540
DAJG 1410·RESUME·110
JBED 1420·PRINT:PRINT"This·filename·already·e
     xists·-·try·using·a·different·one."
DACF 1430·GOSUB·1540
DAFH 1440·RESUME·650
LBEA 1450·PRINT:PRINT"This·file·does·not·exis
     t·-·you·may·have·mis-typed·the·filename.
     "
DAFF 1460·GOSUB·1540
DADH 1470·RESUME·420
HBDI 1480·PRINT:PRINT"The·disc·directory·is·f
     ull·-·please·use·another·disc."
DAIF 1490·GOSUB·1540
DACH 1500·RESUME·650
DBHC 1510·PRINT:PRINT"The·disc·is·full·-·plea
     se·use·another·one."
DACF 1520·GOSUB·1540
DAFH 1530·RESUME·650
DBFB 1540·PRINT:PRINT"Press·any·key·to·contin
     ue...":CALL·&BB18:RETURN
```

Screen Dump

Printers are obviously in vogue this month. Michael Beckett's back with a screen dump program. It doesn't really need saying, so I won't say it... (*say what? – Dave*) Make sure you have a printer before running this program. (*Yep, it wasn't worth saying that, really – Dave*):

```
EAON 10·'·Screen·Dump
HAJD 20·'·By·Michael·Beckett
DAJK 30·'·March·1991
AALK 40·'
HAPK 50·'·SAVE·before·running
AANK 60·'
DAPJ 70·MEMORY·&94FF
DAEF 80·addr=&9500
DAIK 90·FOR·a=1·TO·15
DAFC 100·READ·a$,c$
BAFP 110·cs=0
GAPM 120·FOR·byte=1·TO·20·STEP·2
HAOC 130·b=VAL("&"+MID$(a$,byte,2))
```

Typing listings

If you've never typed in a listing from *AA* before reading this box is a REALLY GOOD IDEA.

- Basically all you need to do is type in exactly what we print EXCEPT the first four letters!
- The first four letters are a code which work in conjunction with our unique and utterly excellent *TypeChecker* program below.
- The lines in our listings should wrap (ie, break at the end of one line and start again and the beginning of the next) in exactly the same place as they do on your screen. If they don't you've done something wrong.
- Only press RETURN when you get to the end of a command line, not when a line wraps.

TypeChecker

This is a program that allows you to check whether you have typed our listings in correctly. Basically type it in then SAVE it for future use. So, when you want to type in an *AA* listing, and you want to double check that you got it right:

- Load up *TypeChecker*.
- Type NEW.
- Type in the listing.
- When you've finished type LIST.
- At the end of every line a highlighted code will appear. It should correspond with the code printed in front of that same line in *AA*. If it doesn't you have typed that line in incorrectly

```
PAML 10·'·TypeChecker·V1.0·-·By·Simon·Forrest
     er·-·Dec·1992
MAOJ 20·'·For·Amstrad·Action·-·Public·Domain
DANK 30·MEMORY·&9FFF
CAJK 40·csum=0
GAME 50·FOR·addr=&A000·TO·&A05B
DAKJ 60·READ·byte$
GAJB 70·byte=VAL("&"+byte$)
FACF 80·POKE·addr,byte
GAFB 90·csum=csum+byte
DALK 100·NEXT·addr
OACI 110·IF·csum<>&2ADD·THEN·PRINT·"Checksum·
     Error":END
LAHE 115·POKE·&A001,PEEK·(&BB5B):POKE·&A002,P
     EEK·(&BB5C)
KAHI 120·POKE·&BB5A,&C3:POKE·&BB5B,&3:POKE·&B
     B5C,&A0
MACN 130·PRINT·"TypeChecker·V1.0·Installed":E
     ND
MABC 140·DATA·CF,FE,93,FE,0A,CA,00,A0,F5,C5,D
     5,E5,FE,0D,CA,22
LACJ 150·DATA·A0,5F,16,00,2A,5A,A0,19,22,5A,A
     0,E1,D1,C1,F1,C3
LAFJ 160·DATA·00,A0,3E,20,CD,00,A0,3E,18,CD,0
     0,A0,2A,5A,A0,7C
LADI 170·DATA·CD,45,A0,7D,CD,45,A0,3E,18,CD,0
     0,A0,21,00,00,22
LACN 180·DATA·5A,A0,C3,1B,A0,F5,E6,0F,C6,41,C
     D,00,A0,F1,E6,F0
KAJC 190·DATA·1F,1F,1F,1F,C6,41,CD,00,A0,C9,0
     0,00,END
```

Turning *TypeChecker* off (it is automatically initialized when you RUN the above program) and back on again is quite simple:

POKE &BB5B,0   To turn it off
POKE &BB5B,3   To turn it back on again

And that's all there is to it! By the way *TypeChecker* was written by our very own, very wonderful, very amazing, very hairy Simon Forrester. What a genius that man is... (*hang on! Who's writing this? – Dave*).

```
EAMC 140·POKE·addr,b
EAFI 150·addr=addr+1
DAMC 160·cs=cs+b
BAKP 170·NEXT
HAMA 180·IF·cs()VAL("&"+c$)·THEN·240
BAJP 190·NEXT
CACO 200·CALL·&9500
HAIC 210·PRINT"ISCRDUMP·is·installed."
BAOJ 220·NEW
AAMN 230·'
JAKI 240·PRINT"Error·in·line";250+(a*10)
AAON 250·'
HAAD 260·DATA·219095010995C3D1BC0E,·443
HAAC 270·DATA·95C3169553435244554D,·3D1
HADF 280·DATA·D000217F95CD7595218F,·48C
HAFG 290·DATA·01E5E5218495CD7595E1,·5BD
HAIA 300·DATA·110000017F02C5D5E506,·318
HAEI 310·DATA·060E00D5E5C5CDF0BBB7,·5C2
HANE 320·DATA·28023E01C1A9874FE1D1,·45B
HAJJ 330·DATA·2B10EC79E1D1C1CD2BBD,·5C8
HAHG 340·DATA·130B78B120D83E0ACD2B,·37F
HAHH 350·DATA·BDE106062B10FDCD09BB,·473
HAPL 360·DATA·FEFC280A7CFEFF20B27D,·5F4
HAKL 370·DATA·FEFD20AD218A957EFEFF,·683
HAJG 380·DATA·C823CD2BBD18F60A1B41,·414
HAOF 390·DATA·06FF1B2A047F02FF1B40,·329
GAPP 400·DATA·0A0A0AFF000000000000,·11D
```

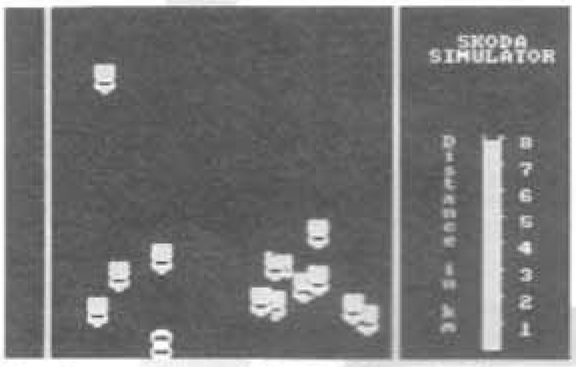


The car that launched a thousand jokes, some of them were even funny.

Skoda Simulator

Finally, as a nail breaker to tide you over 'til next month, here's a re-run of a Michael Beckett original, *Skoda Simulator*. CodeMasters, beware:

```
GAKJ 10·'·Skoda·Simulator
HAJD 20·'·By·Michael·Beckett
DAJK 30·'·March·1991
AALK 40·'
HAPK 50·'·SAVE·before·running
AAMX 60·'
DAJC 70·DEFINT·a-z
EAFH 80·SYMBOL·AFTER·32
EAOG 90·symb!=HIMEM+1
CAPO 100·GOSUB·860
AAJN 110·'
CAJC 120·MODE·1
GAAE 130·INK·0,0:INK·1,26:INK·2,21
GAOC 140·INK·3,10:BORDER·0:PEN·2
JAOK 150·LOCATE·13,3:PRINT"SKODA·SIMULATOR"
HAEP 160·LOCATE·13,4:PRINT"-----·---------"
BAMO 170·PEN·1
LACN 180·LOCATE·12,7:PRINT"By·Michael·Beckett
     "
NAJA 190·LOCATE·9,23:PRINT"Press·SPACE·to·sta
     rt...."
BAIO 200·PEN·3
BBFA 210·LOCATE·4,12:PRINT"Use·2·and·\·to·mov
     e·left·and·right"
FABP 220·WHILE·INKEY(47):WEND
AAMN 230·'
BAIJ 240·CLS
GAHP 250·a$:="Distance·in·km·"
DAAP 260·PEN·3:PAPER·0
DAIN 270·FOR·a=1·TO·15
DAIO 280·LOCATE·32,a+9
IAPO 290·PRINT·MID$(a$,a,1);SPC(2);CHR$(143)
BACP 300·NEXT
GALM 310·PLOT·542,254,1:DRAWR·0,-240
FAGO 320·DRAWR·18,0:DRAWR·0,240
BACJ 330·TAG
```



For those of you with a black and white page, the blobs (Skoda's?) are blue with bits of green, the lines are blue, the gauge is blue and white and the title is green.

```
CAEA 340·km=8
GAKE 350·FOR·a=252·TO·32·STEP·-30
FAMK 360·PLOT·560,a:DRAWR·6,0
DAKH 370·PRINT·km;
DAGA 380·km=km-1
BALP 390·NEXT
CALC 400·TAGOFF
KAIH 410·FOR·a=1·TO·25:LOCATE·4,a:PRINT·CHR$(
     133)
IADM 420·LOCATE·28,a:PRINT·CHR$(138)·NEXT
BAMO 430·PEN·2
CACN 440·LOCATE·33,3:PRINT"SKODA"
IAAC 450·LOCATE·31,4:PRINT"SIMULATOR"
AABO 460·'
BAJI 470·a=0
DADL 480·CALL·&8000,@a
EAIE 490·IF·a=1·THEN·680
AAMN 500·'
BAIJ 510·CLS
EAHB 520·a$:="WELLDONE"
DAJK 530·FOR·a=1·TO·8
JAEO 540·addr!=symb!+8*(ASC(MID$(a$,a,1))-32)
DAKK 550·FOR·b=0·TO·7
GAPO 560·b$=BIN$(PEEK(addr!+b),8)
DAPK 570·FOR·c=1·TO·8
FAAJ 580·x=(((a*8)-6)·AND·31)+c
EABG 590·y=(b+3)-10*(a)4)
FAPK 600·SOUND·1,800-(x*y),3,7
EAEE 610·PEN·y/3·MOD·3+1
NAMG 620·IF·MID$(b$,c,1)="1"·THEN·LOCATE·x+2,
     y:PRINT·CHR$(143)
BAIP 630·NEXT
BAJP 640·NEXT
BAKP 650·NEXT
EAPC 660·x=200:GOTO·720
AAEO 670·'
LAHA 680·a$:="·GAME·OVER·":x=150:y=230:c=1:GOS
     UB·770
MAGG 690·FOR·a=1100·TO·1000·STEP·-2:SOUND·1,a
     ,1,7,,,30:NEXT
AAON 700·'
CAHA 710·x=136
KACP 720·a$:="·Press·Space·":y=60:c=2:GOSUB·77
     0
FAHP 730·WHILE·INKEY(47):WEND
CAHK 740·GOTO·120
BADJ 750·END
AAEO 760·'
EAKE 770·w=LEN(a$)*16+16
OAIL 780·FOR·a=y-36·TO·y+2·STEP·2:PLOT·x-2,a,
     0:DRAWR·w+4,0:NEXT
OAFL 790·PLOT·x,y,c:DRAWR·w,0:DRAWR·0,-32:DRA
     WR·-w,0:DRAWR·0,32
BAEJ 800·TAG
EAOB 810·MOVE·x+8,y-10
DAHC 820·PRINT·a$;
CACH 830·TAGOFF
CAMJ 840·RETURN
AAEO 850·'
HAIE 860·PRINT"Please·wait..."
DAHO 870·MEMORY·&7FFF
DACI 880·addr=&8000
DACO 890·FOR·a=1·TO·53
DANC 900·READ·a$,c$
BANP 910·cs=0
GAHN 920·FOR·byte=1·TO·20·STEP·2
HAGD 930·b=VAL("&"+MID$(a$,byte,2))
EAFD 940·POKE·addr,b
EANI 950·addr=addr+1
DAFD 960·cs=cs+b
BAPP 970·NEXT
HACE 980·IF·cs()VAL("&"+c$)·THEN·1020
CABA 990·NEXT
CABM 1000·RETURN
BAJA 1010·'
JAEO 1020·PRINT"Error·in·line";1030+(a*10)
BALA 1030·'
HALL 1040·DATA·3DC0DD6601DD6E00E5CD,·53E
HABD 1050·DATA·1200E177233600C92100,·32D
HAKF 1060·DATA·C011648206C07012137C,·3A3
HAIC 1070·DATA·1213CD26BC10F5214882,·3C4
HAJC 1080·DATA·060ECD238110FB2114C3,·388
HADG 1090·DATA·224682AF323F823E5032,·34C
HANI 1100·DATA·4082CD0DBDED53428222,·47F
HAJG 1110·DATA·44823E1E3241823E47CD,·369
HACM 1120·DATA·1EBBC486803E16CD1EBB,·49D
HALI 1130·DATA·C48F803A3F82B7C03A41,·4C0
HADI 1140·DATA·82571EB6217581CDC880,·4D9
HAEI 1150·DATA·214882060EE5C5CD9880,·48E
HAIJ 1160·DATA·C1E1232310F5CDFD80CD,·604
HAKI 1170·DATA·19BD18C72141827EFE07,·41C
HAPA 1180·DATA·C835C92141827EFE32C8,·520
HACJ 1190·DATA·34C956235E7BFEC73008,·44C
HALI 1200·DATA·E521CC81CDC880E13434,·5B1
HACL 1210·DATA·7EFEB4C05F2B563A4182,·4CD
HAIG 1220·DATA·47057A90FE0530063E01,·2CE
HAHC 1230·DATA·323F82C9CD2381210782,·3D7
HADG 1240·DATA·E5816482260068290 94E,·2DD
HAPE 1250·DATA·2346260006A09545DE17E,·312
HALC 1260·DATA·234E2332E480D50600ED,·3F2
HAKH 1270·DATA·A00C18FBD17AC6085730,·457
HAMJ 1280·DATA·807BC6505F7ACEC0570D,·464
HAHI 1290·DATA·2BE9C9214080257EB7C0,·4DC
HAPA 1300·DATA·3650244682360023300,·207
HAEK 1310·DATA·2BCD26BC2246827CFEC7,·505
HAMJ 1320·DATA·C07DFEC4C03E02323F82,·4F2
HADL 1330·DATA·C9C5CD468179C62AD62A,·5BB
HACK 1340·DATA·FE2A30FAC60977237987,·4BB
HAFI 1350·DATA·FE5030004D62818F8473E,·41D
HACL 1360·DATA·1E907723C1C9E5D5ED53,·5D4
HAKG 1370·DATA·42822A44820605CB1CCB,·371
HAPI 1380·DATA·15CB1ACB1310F60603D5,·3BC
HAGL 1390·DATA·ED5B44822B7ED52EBE110,·5E0
HAKG 1400·DATA·F4ED534282224482434C,·46F
HAPC 1410·DATA·D1E1C9051100100F8000,·330
HAGF 1420·DATA·00740FE200004F0F2F00,·1F2
HAMG 1430·DATA·005FFFAF00006E006700,·2E2
HAIH 1440·DATA·004C002300007FFFEF00,·2DC
HAJD 1450·DATA·00270F4E0000470F2E00,·108
HAKD 1460·DATA·00470F2E0000270F4E00,·108
HAIG 1470·DATA·003FFFCF00004C002300,·27C
HAJC 1480·DATA·004C002300003FFFCF00,·27C
HAKB 1490·DATA·00070F0E0000610F6800,·FC
HAGA 1500·DATA·0313000000000000071FF,·186
IAJJ 1510·DATA·E8FFFFFFFFFFFFFFFFFF,·90F
IANH 1520·DATA·FFFFFFFFFFFFFFFFFF7F,·976
HAOM 1530·DATA·FFEF37FFCE470F2E0C00,·502
HAGO 1540·DATA·13CE0037400F5FBFFF DF,·4D2
HAOI 1550·DATA·57FFAE11FF0000F60003,·495
GAIJ 1560·DATA·12000000000000000000,·1
```

Get Listed

Reckon you could come up with a listing as good, if not better, than this lot? Then prove it to us and to the world. Send in your Type-Ins (on tape or disk please) to:

Amstrad Action,
Type-Ins,
30 Monmouth Street,
Bath BA1 2BW.

AA SMALL ADS

For Sale

CPC 464, colour monitor, joystick Multiface, software, (many games), user manual £200. **Phone Gabellone 031 661 0704 or leave a message.**

AMSTRAD CPC6128 colour monitor, plus second disk drive and Dot Matrix Printer - DMP 2000. software packages, includes Mini Office, Tasword, Dr Draw and Pascal/MT. Games and extras available too. Price £180 ono. **Phone 0242 581558**

AMX MOUSE £20 FDI1 £30, Mini Office II (disk) £8. Games and Serious software on disk and tape SSAE for list to **J Patchett 63 Edencroft, Highworth, Swindon SN6 7NH. Tel 0793 764018.**

AMSTRAD disk software, Mini Office II, Brunword 6128+, GAC + manual, French Test, Navy Seals (+) Operation Thunderbolt (+), Chart Attack, Turrican 2, F16 Combat, Klax and many more. Please ring if interested. All as new, also old AA's, computer desk. **Ring 0865 863177 ask for Brian.**

AMSTRAD CPC 464 with green screen and modulator, games, joystick, G.W.O. Also 64K Memory expansion £100 ono and £25.00 respectively. Telephone 0271 73549 eves and weekends.

DD-1 DISK DRIVE £70 ono. Amstrad CPC464 with colour monitor, joystick, lots of games £100 ono. Hisoft 'C' Compiler (For CPC464 with disk drive) £15. **Tel 0249 650766.**

200 CPC CASSETTE GAMES. All good condition and boxed. £200 ono, may consider splitting, includes many compilations. Also for sale, back issues of AA. £15. **Phone Sandra (0324) 485628.**

AMSTRAD CPC6128 computer. TV Modulator, disk drive, 2 joysticks, tape recorder, CP/M disks, 10 games disks. Books, perfect condition £150 + P&P. **Tel Darren 0302 864730.**

165 GAMES on 130 cassettes worth over £500, will accept £150 + P&P. 10 compilations containing 78 games on tape £40 + P&P. **Tel Darren 0302 864730.**

AMSTRAD CPC DISKS containing: Sim City, Eswat, Hunt for Red October, (Double Dragon, Rodland, Midnight Resistance and Nightbreed) and many more £5 each. Also a DD-1 disk drive £50 ono. **Phone 0706 817649.**

AMSTRAD CPC464 Cassette games, large selection from £2 also list available. Wec Le Mans, P47 Eswart, Aliens 1943, Hitpak, The Biz Marauder, Cabal 720, Sickworm Xevious, Overlander Grand Prix Selection. **Tel 0582 581259.**

AMSTRAD CPC 6128 for sale including TV Modulator, manuals, disk drive, two joysticks, CP/M disks, 10 disks of games. £150 + P&P. **Tel Darren 0302 864730.**

GAMES FOR SALE on tape and disk including Final Fight and Turrican 2. For a list send SSAE to **Kevin Hammerton, 6 Home Road, Kempston, Beds MK4 39BL.** Also wanted Elite on disk.

AMSTRAD 6128 MP2 Modulator, Mini Office 2, Prince of Persia, F16, 6 other games, 23 AA mags, 21 cover tapes, blank disks, tape lead £180. **Phone Ed 0232 371092 after 6pm.**

SILICON DISK (464/664) plugs into expansion port to give 256K second disk drive. Halves loading time £75. **Tel 0752 700844 (evenings).**

CHEAP GAMES!!! cassettes £1, compilations £3, disks £4, every Amstrad magazine in binders. Ring for list. Also Sprites Alive, Elite, Stop Press, Printer Leads, Cassette Deck, Leads. **Phone Wayne 0532 572154.**

AMSTRAD 6128+ colour stereo monitor, joypad, games, magazine, manual and system disk. Hardly used, boxed as new. Excellent condition, bargain at £150. **Phone 0553 630405.**

GAMES FOR SALE for as little as £2 each. Send SAE for list of tapes available. Ryan Stephenson, **49A Trowley Rise, Abbots Langley, Herts HD5 0LN.**

BOOKS Amstrad Graphics The Advanced User Guide £4.50, 100 programs For the Amstrad CPC 464, 664, 6128 £5.00. Mastering Machine Code on Your Amstrad 464/664/6128 £5.00. **Andrew Glenhill, 13 Brancepeth Close, New Marske, Redcar, Cleveland TS11 8JE**

MAGS Computing With The Amstrad £6.00 plus postage, SOFTWARE: Goldmark, Utility Disk One £4, Goldmark Speedtrans plus 'disk' £3, Beebugsoft Bocksmith 'disk' £4, Arnor Protext disk £7. **Andrew Glenhill, 13 Brancepeth Close, New Marske, Redcar, Cleveland TS11 8JE**

ROM Rodos 2.19 £5, Utilities The Hack Squad Rom 1990 £5, HARDWARE: rombo Rom Board £6.00, DK 'tronics Lightpen £5. **Andrew Glenhill, 13 Brancepeth Close, New Marske, Redcar, Cleveland TS11 8JE**

ATTENTION ALL ADVENTURERS . For sale the ultimate game - Bard's Tale, only £2.50 plus postage and packaging. **Phone Duane on 0206 303131, Monday to Friday between 5pm and 7pm.**

CPC 464 plus DD1 disk drive and colour monitor. All vgc, lots of software disk and tape £200. **Phone Steve on Doncaster 0302 700424.**

ONE MINT CONDITION Amstrad 464 plus colour monitor, large box, new games near £300 worth. Light Pen, new joystick boxed. Bargain £200 can delivery max 30 miles. **Dorking 0306 881514.**

AMSTRAD 6128+ with colour monitor, seven games, manuals included as new condition £130. Tel 0754 74615 (Lincs).

AMSTRAD CPC464 with green monitor, manual, joystick, over 20 games (incl Chess) and Tasword, only £49 plus carriage (or buyer collects). **Tel 0603 501900 - Norwich.**

NORTH & SOUTH cassette verson for sale, only £6.50 including P&P. **Contact Ian Chambers, 121 Allectusway, Witham, Essex CM8 1NT.**

50+ AMSTRAD CASSETTE games for sale from £1, suitable for 464 etc. Send SAE for list to **G Jones, 14 Merrick Place, Hardsthorne Road, Lochside, Dumfries, Scotland DG2 9QP.**

AMSTRAD 6128 with green monitor, complete with manual, joysticks, Multiface II, Dust covers, lots of games, utilities, magazines and several books, only £150. **Phone (High Wycombe) 0494 530367 after 6pm.**

AMSTRAD CPC 6128 with colour monitor and tape deck. Lots of games on tape and disk. Lots of AA magazines and cover tapes. Joystick mouse. **Phone Sean 0703 738553.**

AMSTRAD 464 games for sale. From 30p onwards. Limited amount. All originals. All secondhand. Send SAE for cassette list to **33 Townhall Road, Great Yarmouth, Norfolk, NR30 1DJ.**

ATARI 600X1 complete with XC12 data recorder and powerpack. Very good condition £50. **Phone Alan 091 5497407 (Sunderland).**

AMSTRAD ACTION magazines for sale. Issues 39-67, 69 and 71-74. **For prices please ring 0504 43373 after 2pm ask for Arun.**

AMSTRAD PCW 8256 with printer, word processor software, monitor, 3" disk drive all manuals and CPM/Systems disks £230 or swap for 6128 with monitor and £120 ono. **Phone Matt 0444 450454.**

3" DISK DRIVE would suit CPC range or possibly external drive project. Hitachi made drive, full working order. £20 ono. **Phone 0444 450454 any time ask for Matt.**

CPC6128 colour monitor, tape deck, Lightpen, ROM and joysticks, software includes Protext, Mini Office II, Lemmings, Fun School £200 ono. **Phone Derek on 0227 454109.**

BARGAIN! AMSTRAD CPC 464, green screen, T.V. Modulator, large old colour screen, speech cynth, 150+ games, joysticks, all for only £200. **Answer phone/Fax 0689 875530 Now!**

AMSTRAD CPC 464, colour monitor, manual, AA's 69-90, cover tapes and over 100 games £150. **Phone 0752 706386.DISK DRIVE + 10** games £100. Multiface II with Insider Program £25, MP-1 464 T.V Modulator £25. **Contact Mr Darby, 73 Pelham Road, Cowes, Isle of Wight PO31 7DN.**

GAMES FOR SALE 100 £59, includes Bloodwych, Lords of Chaos, Dizzy and loads of compilations. Also 200 ZX Spectrum games and hardware £119. Includes postage to anywhere in the UK. **Contact Raymond Jakes, 32 Crichton Avenue, Wallington, Surrey SM6 8HL.**

CPC464 green monitor, disk drive, Extra 256K Memory, TV Modulator, loadsa disks, serious games, manuals, loadsa AA mags, DPM 2000 printer, spare CPC6128 all working £145 ono. **Phone Taunton 0823 490768.**

AMSTRAD 464 computer plus colour monitor, with 40 games, 3 keys not working, but still in good working order £80 ono. **Phone Mrs Porter 081 204 9270.**

MAGS! MAGS! mags AA, ACU, CWA, Amtix. Most issues available from 1985 to 1993. Selling singly or as one lot. No silly prices, best offer secures. **Tel 0253 723226 (Blackpool).**

CPC464 with colour monitor, joystick, over 60 tapes, manual, magazines (issues 42-91). All for £150. **Phone after 4.30pm on 081 446 0523.**

AMSTRAD CPC6128 with modulator, Multiface, tape deck, games, Genius mouse, PD software, demo's, GX4000 console, disk box, Amstrad Action mags, cover tapes, joystick and more, sell for £250 ono. **Telephone 0623 843240.**

AMSTRAD MAGAZINES selection including early CWTA (tape) £5 also some PC magazines £1 each. **Contact John Vanlear, 19 Hamilton Road, Hayes, Middlesex UB3 3AR.**

AMSTRAD CPC 6128 mono monitor for sale, disks, manual, loads of AA mags with cover tapes, word processor, cassette deck. Maybe deliver Leicester, Northampton £160 ono. **Phone Sim (evenings) 0858 465570.**

CASIOTONE MT-140, music keyboard, excellent condtion, hardly used, £90. **Telephone Alan on Sunderland 091 5497407.**

6128 COLOUR MONITOR £120. 664 mono monitor needs keyboard underlay £50, 100+ disk games £100. 400+ tapes £150.00. Speech £10.00, Multiface II £30.00, mags 200 of £75 bound. Recorder £15.00. **Wayne 0532 572154.**

FANTASTIC DISK GAMES for sale!! Many titles including compilations available. **Please call James on 0533 836453 for list.**

AMSTRAD 464 GAMES 100 £40 lot. **Tel 0753 551767 after 6pm or any time weekends.**

CPC 464, colour DD1 disk drive, Rombo 1, Lightpen, memory expansion, Tv Tuner, mouse, 40 plus cassette games, office disk software inc Protext, all boxed with manuals, £100 (will separate). **Ring Stuart 0603 411540.**

CPC 6128 COLOUR, 3.5" disk drive, DMP2000 printer, joystick, mouse, Protext ROM, ROMDOS, Protype, AMX Stop Press, OCP Art Studio plus others, games AA Cassettes £350. **Andrew 0225 873200 (eves).**

AMSTRAD 6128 keyboard with manual, 40 blank disks, Amstrad Actions issues 72-90 and Magnum Light phaser. Very good condition £45 ono. **Phone 0306 882883.**

BOOKS AND CASSETTES for CPC, including Sup[er Sega worth £300, sell for £100. All must go together. **Phone 0252 6168251 and ask for Michael. Also offers for damaged CPC 464.**

GAMES FOR SALE, tapes (from £1.50) and disks (from £4.00). Phone or send SAE for list fo games. **S Muirhead, Oakbank Farm, Lamlash, Isle of Arran, KA27 8LH. 0770 600404 ask for Stephen.**

AMSTRAD CPC 464 with colour monitor. Perfect condition, including many games £125 ono. Children's educational programs like Funschool, Magic Maths, reasonable prices. **Tel Lynda 081 361 3715 evenings, weekends.**

DAISYWHEEL PRINTER used with CPC 464, works perfectly £85 ono. Also Protext on ROM, ROMBOX, Multiface and 2 volumes of Amstrad Action, will split. **Telephone Lynda 081 361 3715 evenings/ weekends.**

Go Cartin'



You can't get quicker than a quick fit fitter? Rubbish. If carts were car mechanics they'd service your sump in seconds. Simon gives CPC carts the MOT treatment.

Let's face it. Loading from tape is a drag. Even the most ardent 8-bit devotee has to admit that the system is slow and unreliable. So that's why disks are handy. But, there is another, even speedier, alternative available to thousands of CPC Plus owners – carts. On top of the Plus owners (*must cause a bit of a crush – Dave*) there are several thousand GX4000 owners for whom carts aren't an alternative – they have to use them.



Land of the Giants – is that a GX?



A few years back now, Amstrad decided it was about time to launch another attempt at taking the home entertainment market by storm (the previous attempt being the CPC itself). Indeed, *New Computer Express* (remember that?) once ran with the cover story of Amstrad's new 16-bit computer, using an artist's impression not unlike the Plus range we know today. What *Express* failed to discover (probably because the whole project was kept a very big secret) was that the new computer was, in fact, a continuation of the existing CPC range, and still an 8-bit after all. The way in which the new machine worked was simple.

What you effectively got for your money when you bought a Plus was two computers welded together. On power up, you got the option to use Locomotive BASIC (the language that all CPCs are supplied with) or play a game from Ocean called *Burnin' Rubber*. BASIC was, well, BASIC really, and *Burnin' Rubber* was a really impressive piece of software that far surpassed any other CPC games (the normal kind) in terms of graphics and sonic capabilities.

The gimmick/catch/innovation (delete according to bias) was that these two options were supplied on a cartridge.

As well as containing a

Pro Tennis Tour



The one thing that's been with the microchip since its birth has been the bat and ball game. Inspired by tennis, even Pong, arguably the first digital arcade smash, followed that format. And the most popular games when it came to those early Binatone and Atari consoles were always bat and ball affairs.

But you're not likely to pay £25 for a boxed copy of *Pong*, so what has *Pro Tennis Tour* got that the earlier square-balled effort hadn't? Well, in terms of gameplay, not a lot, really.

You see, when it comes to hitting balls back and forth, nothing much has changed. Okay, there's a net in there now, but even with the ball working in 3D space, that's not a problem, because it's very rare that you ever hit it. So why shouldn't you stick with the older, naff games? Here's why...



The giant killer tennis balls from Mars.

● 3D – Watching a ball fly left and right across a black screen is one thing, but whacking a ball back and forth across a full perspective court is a completely different matter. It gives a sense of space and realism, drawing you into the game so that you feel part of it, rather than controlling your player remotely.

● Scoring – Throw away that irritating Ping Pong scoring system, and score points tennis style.



Clementine had meant to see the doctor about the size of his pendulous buttocks, but the match was upon him. Darn it!

● Aiming – Early knockabout games didn't have an aiming system. You either hit the ball, or you didn't. Better versions had a deviation in the direction of the ball depending on whereabouts it hit the bat. Real tennis is different. The ball's direction and speed depend on many factors, such as how hard the player hits it, any spin the ball has accumulated, and the position of the ball in relation to the player. *Pro Tennis Tour* takes into account all these factors. Sure, the ball doesn't move completely realistically, but at least the way you hit it does have an effect on where it goes making the game much more interesting.

● Graphics – Looking down at my own body, it's pretty easy to see that I'm not a white rectangle (*only just – Andy*). As a human, I always empathise more strongly with sprites that look human. Psychiatrists might call it a form of xenophobia, but I reckon I'm not alone in warming to bipeds as opposed to blocks.

So, after a distressingly long bit of wibble, how does the game measure up? Well, what can I say? Graphically, it's got everything it takes to carry the game and more, with incredible attention to detail and a huge amount happening (linesmen, umpires, wiggling bums when a player's waiting to receive a serve, etc).

Okay – since when has a tennis ball made splatting noises when you hit it? Never, that's when. And despite a few weirdnesses – occasionally it lets you return balls that have flown way past you, making it seem as if the ball has bounced off the back wall and back into play – it's got to be one of the best tennis games the CPC's seen to date. If you've got a cart facility, rush out and buy it, NOW!

90%



Fortunately, his opponent had his hands stuck together, so he still had a chance.



Burnin' Rubber, the game that comes on the cartridge that also contains Locomotive BASIC for the Plus. Yes, I know it's paused – you try grabbing this on your own with our archaic system.

really rather fun game, the cart contained the BASIC ROM that normally sat inside the CPC. Take out the cartridge, then, and insert another, and you could use the software on the new cart instead. Wow, and indeed, wow.

It's a game, innit?

For all those who didn't want to bother with all that computer nonsense and just wanted to get down to the pure gaming, Amstrad obliged by also producing the GX4000. This was the Plus bit of the CPC Plus without the CPC bit, ie, it had no keyboard (*you mean a games console, then? – Dave*). Unfortunately, it didn't sell. Actually, that's a bit of an understatement. The word 'flop' springs to mind. Why? Well, whereas the Plus range caught sales from CPC owners who wanted a souped-up CPC, the GX4000 attempted to sell itself in the console market, to millions of kids who'd much rather go out and buy a Sega MegaDrive instead.

These days, though, you can strike it lucky, and pick up a GX4000 from as little as a fiver from classified ads pages (see page 29) or even local markets. And, if you haven't got a Plus, it's well worth the dosh, just so that you can have a go at the cart games you can still get hold of.

Over the next couple of months, we'll be taking a look at every single cart game you can still get your paws on today. Don't get too excited, there's only about 16 of them (as far as we know). But with a bit of luck, there should be some exciting developments coming along from Campursoft in the not-too-distant future, plus there are a few commercial games in the pipeline that may be ported on to cartridge for the sake of GX4000 and tape machine owners who'd like to play some of the stuff that disk-owning CPCers have been enjoying since the dawn of time (*since tea time, really – Dave*). So the CPC cart scene is still going strong.

So as well as looking at the games that have already been released, we'll be looking around for any new cart releases. But for now, here are the titles we'll be covering, and who sells them:

Trading Post - Victoria Road, Shifnal, Shropshire, TF11 8AF

- *Barbarian 2*
- *Batman*
- *Klax*
- *Navy Seals*
- *No Exit*
- *Operation Thunderbolt*
- *Pang*
- *Pro Tennis Tour*
- *Robocop 2*
- *Switchblade*

Wave - Dept AA9308, 1 Buccleuch Street, Barrow-on-Furness, Cumbria LA14 1SR

- *Chase HQ 2*
- *Mystical*
- *No Exit*
- *World Of Sports*

If there are any titles you think we've missed out (and yes, I know about *Burnin' Rubber*, but what's the point in reviewing that?) feel free to let us know about them. More carting next month.

Robocop 2

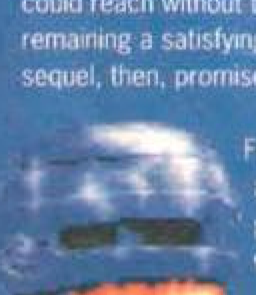


When I came into work today I was looking forward to spending the day sorting through a huge stack of enjoyable, complex, console quality games. So, when I saw *Robocop 2* staring up from the pile, I couldn't resist it. The prequel, *Robocop* (*you don't say – Dave*) was incredibly good fun. It had loads of different sections, all of which you could reach without too many problems, while remaining a satisfyingly challenging game. The sequel, then, promised to be good.



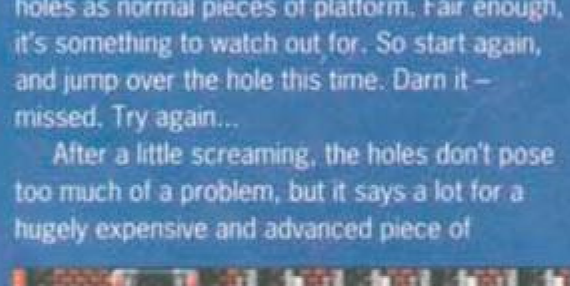
Dead or alive, you're coming with me. Knowing this game, the word is 'dead'.

So, insert the cart. Press Fire a few times to cut past all the usual wibble and get to the nitty gritty. Here we go. Enter Robo, screen left. And what a screen! It's full of beautifully-blended colours, wonderfully-drawn graphics, and loads of moodily-lit objects. A quick test on the ol' trigger finger shows Robo to be a pretty good shot, with a nice array of directions. So now we've got an absolutely fab little metal dude with an impressive gun and lots of things to shoot – let's move!



You walk forwards. All too late, you see the hole you've just fallen down. Cunning, disguising holes as normal pieces of platform. Fair enough, it's something to watch out for. So start again, and jump over the hole this time. Darn it – missed. Try again...

After a little screaming, the holes don't pose too much of a problem, but it says a lot for a hugely expensive and advanced piece of machinery such as Robocop if it has problems jumping over small holes.



The future of law enforcement. There really ought to be a law against this kind of tat. And enforced now, not in the future.



Robocop 2 is all a matter of timing – making sure you're out of the room when it's on.

But that's the story all over for *Robocop 2* – nice graphics, pleasing sound, smooth sprites, but an absolutely impossible landscape made up of objects that either have no bearing on the game but look like they might, and extremely irritating obstacles. And every time you you meet a new obstacle and, almost inevitably, die, you get sent all the way back to the very start. Great. Pass me a book, someone.

I think I've found the first CPC cart game that follows the rules of most other cart formats – impressive graphics, nice sound, and a reasonably impressive presentation all round, but fatally flawed gameplay. With a bit of luck, it'll be the only one.

This game isn't horrific, as nothing that's received so much attention from a development team could be all that bad, but they should look up the words 'Game' and 'Play' in the dictionary some time. I'd give *Robocop* 70 per cent for the initial impact it makes, but having actually tried to play the darned thing, I think 40 per cent is altogether much more reasonable.

40%

Public Image

Psst! Wanna get your hands on some free software? Wanna copy it? And it's all kosher and above board, guv. Y'see free, non-copyrighted software is what the Public Domain is all about. Tim Blackbond rounds up this month's PD news and software.

WHISPERINGS

● Matt Gullam or Presto PD is soon to move house – again! Although he hasn't actually shifted yet, from September the 28th his new address will be: 119 Pwll Street, Landore, Swansea. Don't even *try* to pronounce the street name. The postcode is, as yet, unknown, but probably less likely to leave your tongue hideously contorted.

● As of 31st September, Adventure PD will be officially no more. The librarian, Debby Howard (*sounds familiar – Dave*), isn't deserting the CPC (*that's a relief, since she's only been working for us for two issues – Dave*). For adventure fans who simply can't live without the service, all the disks will be available from Adam Shade of Dartsma PD, 47 Kidd Place, Charlton, London SE7 8HP.

● Britain's most eagerly-awaited DTP program, *Powerpage 128* has finally been released! The beta-test version was reviewed wa-a-a-a-ay back in issue 85, and was expected to be released not long after that. The full version features a zoom mode, A5 and A4 page printing, 72-line pages, eight scales of print quality and a host of utilities as well as a collection of page borders for use in your own creations. Robot PD isn't open yet to distribute it, but copies are currently available from Presto PD, 58 Graigluyd Road, Cockett, Swansea SA2 0XA.

SCRIBBLINGS

Quick request

This is just a short letter (*that accounts for it not being very long – Tim*). Could you inform me of the best public domain disk copying utilities. I find the *CP/M DiscKit* a bit of a drag for regular use, as I have to boot up CP/M before I can use it, and it's too slow.
Carl Morris, Birmingham

You've just asked for probably the most popular form of PD program there is! Every library has got one or two disk-copiers of some nature (but then, let's face it, they'd be lost without one!). *Disk O' Magic* is probably the best, and is available from just about every library

The existence of cassettes

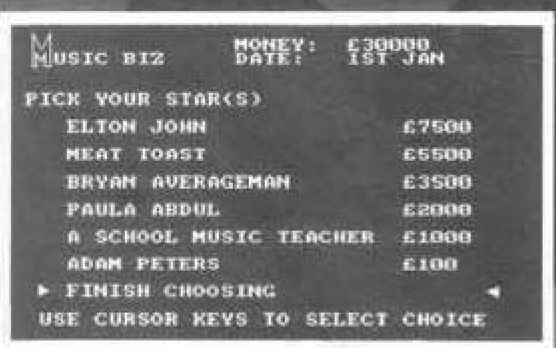
Ever since I started buying *AA* (not long ago), I have been interested in the concept of Public Domain. I don't have too much money to spend on full price games, owing to a very tight limit on my pocket money. The problem is, I've got a CPC 464 Plus, and you never seem to mention PD software on cassette for that machine. Surely somebody must offer a tape service?
Jason Dickinson, Wakefield.

This is not the only letter I've received requesting more support for cassette PD. Such libraries DO

Music Biz

By Joe Moulding and Russel TJ
Available from Sleepwalker PD, 9 Meeting House Lane, Balsall Common, West Midlands

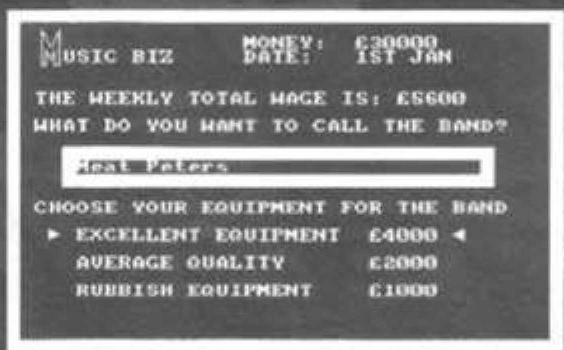
Have you ever thought of becoming a rock star? It's a one-way express ticket to fame and fortune, and the best bit is that you don't even need to know how to play an instrument. I mean, just look



1 Adam Peters gets together with Meat Toast and before long...

at Nirvana – pick up a guitar, play the same chord over and over again at varying tempos then give it a snazzy name (like 'Grunge', for example, that should please the kids and get into *Smash Hits*) and hey presto.

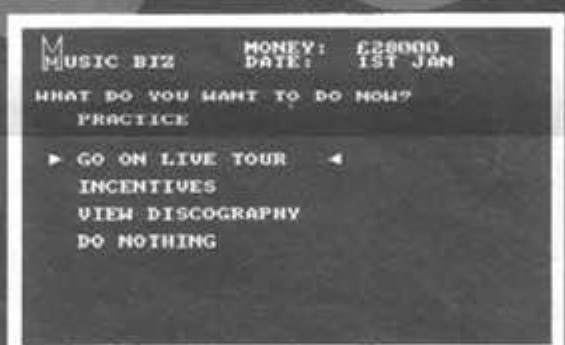
For those who don't want to have to leave their bedroom, the next best thing is to get *Music-Biz*. Another piece of evidence to prove that the CPC PD scene isn't exactly original, but pretty darned funky, it's basically a version of



2 Ta-dah! Meat Peters are born. They can't sing, they can't play. The perfect formula.

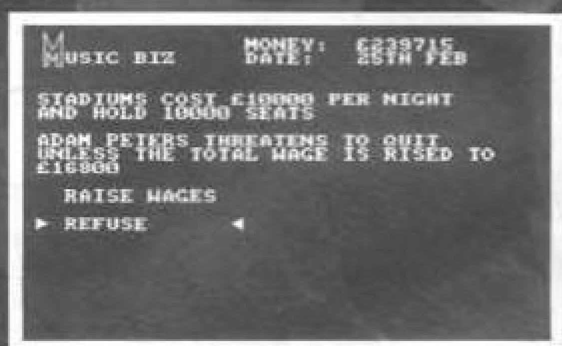
Codemasters' extremely-poor *Rockstar Ate My Hamster* without the pretty graphics.

The long and winding road to fame starts with you choosing your band. You can choose up to four artists from the six available, who range in talent from Elton John to Adam Peters (*my predecessor – Simon*). Then, you're presented



3 We've got the band, we've got the instruments. Let's get out there and tour. First stop – the bus depot, Slough.

with the main menu. Before you get a recording contract, you can only utilise a practice room (just a clever way to waste time), go on a live tour (probably the most used option in the game), buy gifts for the band (to stop them demanding more money and to keep them in the band) or view the discography (which is pointless before you've actually recorded something). The only way to get major record labels to notice you



4 Peters already wants a wage rise. He knows where he can stuff that...

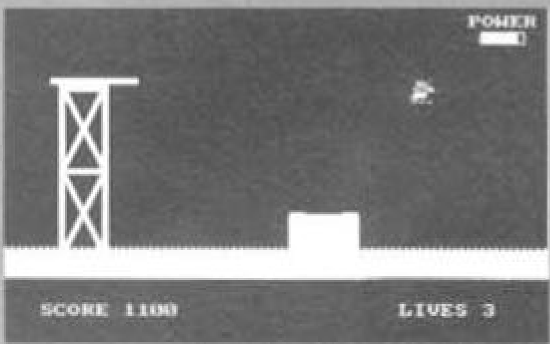
is to get out and play in front of a live audience. Starting off with the pubs, you can move up to clubs, concert halls and finally Wembly-style venues in order to build up popularity with the public. Choices have to be made as to how much to charge at the door and for how many days you should be gigging (up to seven).

After a few live appearances, you'll start getting offers for a recording contract. Particularly important, these, as they give you

SCRIBBLINGS

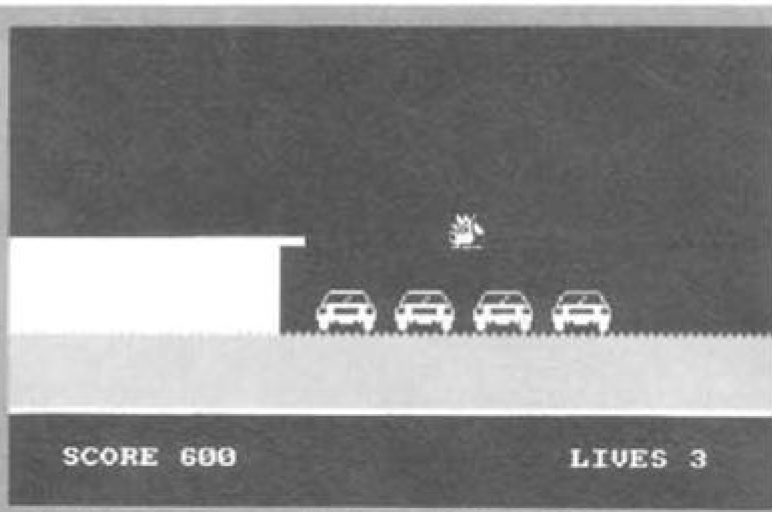
Good stunt, or what?

You reviewed *Intergalactic Stuntparrot* (which I wrote to my shame!) a few months back. This useless game was published in a listing by a very old magazine called *Computer Gamer*. The original publishers, Argus Press, still have copyright on this program and I have heard that they still kick up a stink about things like this. I certainly wouldn't have given permission for this game to become PD as it'll give me a bad name.
Rob Buckley, London



Do you recognise this game? If it's in your PD library, it shouldn't be, basically.

Do you always have such a low opinion of your programs? Before you go any further, *Stuntparrot* wasn't *that* bad, it just had an over-difficult first level. But other than that, it was quite a fun little number – well, I liked it, anyway. Still, if it isn't Public Domain, it would be advisable for all libraries to remove it from their catalogues immediately, just to be on the safe side. Thanks, Rob!



Is he chicken or is he a Stuntparrot? If he's chicken at least we get something to go in our sarnies if the stunt goes wrong.

exist, and as I have recently purchased a second-hand 464 look out for a Public Domain tape feature next month...

SOFTWARE REVIEW

E-Crypt

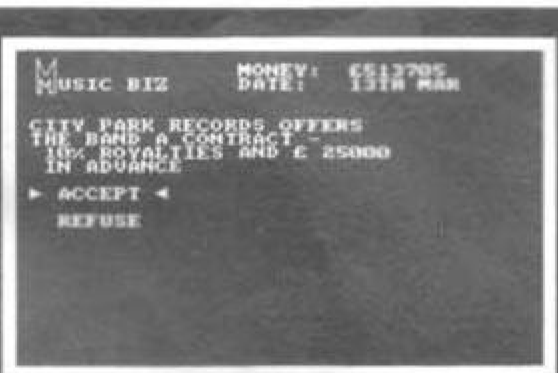
By Joe Moulding
Available from Sleepwalker PD, 9 Meeting House Lane, Balsall Common, West Midlands

E-Crypt is a puzzle game so anyone who likes nothing more than killing a few thousand aliens before breakfast might as well switch off. Secondly, it involves numbers so anyone who hates maths might as well leave the room too. Who does that leave? The entire membership of Mensa (who, incidentally, must be desperate for members judging by the difficulty of the 'brainteasers' recently).

When the game starts, the screen is split up into two 8x8 grids with a time-bar at the bottom of the screen. Before that time runs out, you must match the pattern of numbers shown on the right-hand grid. Numbers are placed on the left hand-grid in clusters of four, surrounding the square the cursor is positioned on. Overlapping numbers will be increased by one, until they get above four when they will be reset back to zero (shown as a blank blue square). When you have matched the patterns, a quick jab of the old ENTER key will whisk you away to the next level. Understand? No? Tough.

Granted, the game is based on an original concept and is well executed, but the major problem is that it's just a little bit too easy. It might keep really young kids away from that pirated copy of *Reservoir Dogs* for a while (*are you sure? – Dave*), but I doubt it'll take anybody else too long to work their way through the levels – and there aren't that many of them, unfortunately. Don't expect years of enjoyment.

69%



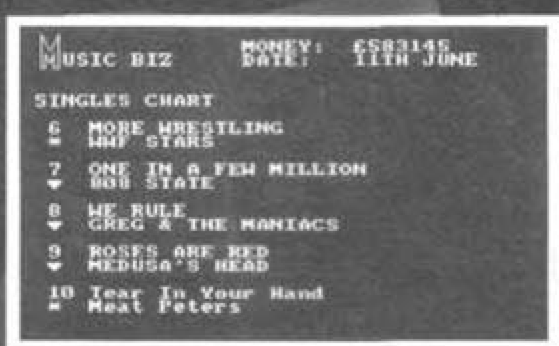
5 Despite Peters walking out, Meat Toast still manage to get a recording contract.

access to recording studios to do the singles and albums. This is where *Music-Biz* has the edge over Codemasters' attempt. Instead of having to record a whole album in one chunk, songs can be recorded separately and released way before the album comes out. Also, to add a bit more realism, you can choose a B side for the single which may help sales a little bit (*not if they're as bad as most of the B sides I've heard – Simon*).

The charts come out once a week and can be amusing for new players. Constant digs are made at various bands, such as Altern-8 (with their aptly-named album, *Unfortun-8*) and R.A.M. (with the smash-hit, *The Milkman Sleeps Tonight*). After a while, it becomes a tedious chore to press space 20 times just to see how well you're doing. If your sales are tumbling (it is possible for a song to go flying into the chart at number 10 and then straight back out the following week), it 's wise to promote your product. You have to be careful, though, as you can spend £200,000 plugging an album and the sales will still drop – life isn't THAT easy...



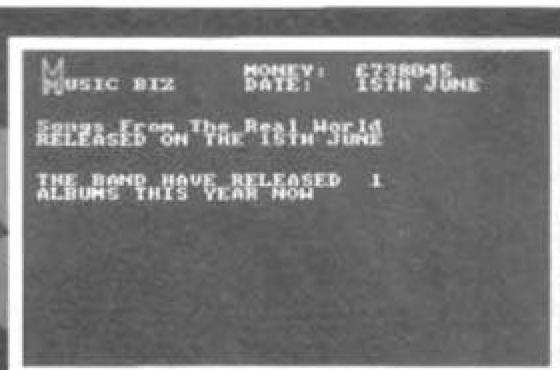
6 The first single, a cover version of a Tori Amos song because we can't be bothered doing our own...



7 And straight into the chart it goes. Watch the money and fans roll in!

At the end of the year, you'll be given a rating telling you how well you did, the aim being to get as highly ranked as possible. The game doesn't take into account every aspect of being in a struggling rock band. What about merchandise (T-shirts, baggy shorts, etc), television appearances and live videos? There's more to a band than touring and releasing singles. Other than that, it's just a fun game that also requires a bit of brain-work. It's a hit!

80%



8 Songs From The Real World – a suitably dumb name for a dumb album.



9 There, told you so. To fulfill the contract, there's only another 12 singles and one album to go. Ho hum.

Assembly Line

Simon takes a short break from the usual scary technical things, and starts fiddling with the truly terrifying instead.

Aloha, and get ready. For a change, there'll be no bouncing balls this month (*now that will make a change – Dave*). Instead, the rebel machine code column is going to fall into line, and cover how to program ROMs. *Breakout* fans can just hold their horses for another month, as we're going to do something serious.

So how do ROMs work? Well, they sit parallel to screen memory, switched out of the way. So a ROM's source code has to start at &C000, and can't run any further than &FFFF (okay, okay, so strictly speaking that's screen memory and a little bit, but who's counting?).

Stand by, then, for everything you ever wanted to know about machine code and the common ROM, but could never really be bothered to ask because you didn't know you wanted to ask it in the first place.

Unfragmented

Here it is – the final version of *ROM Setup Code* by the unparalleled Simon Forrester. Send all letters of congratulations and gift tokens for Kostas' Kebab House to him at the usual *AA* address.

```
 ORG &C000
 LIMIT &FFFF
 WRITE "IMAGE.BIN"

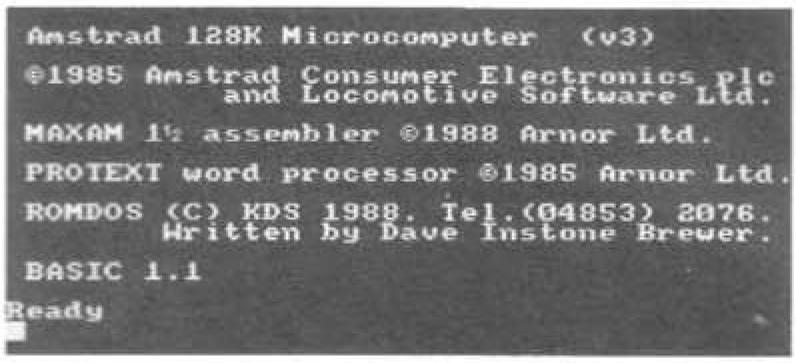
 DB &01
 DB &01,&02,&03

 DW NAMTAB

 JP ROMINIT
 JP BLEEP
.NAMTAB
 DB "ROM INI","T"+&80
 DB "BLEE","P"+&80
 DB 0

.ROMINIT
 PUSH HL
 PUSH DE
 Startup Routine
 POP DE
 POP HL
 SCF
 RET

.BLEEP
 LD A,&07
 CALL &BB5A
 RET
```



Just to make you all really jealous, take a look at the office CPC's ROM setup. With all those ROMs, we hardly ever need to load anything from a disk drive – it's all instantaneous.

Slots

A ROMboard, in usual circumstances, can take more than one ROM. CPC464 owners can have up to seven ROMS installed (using slots 0-7, ROM 0 being taken by BASIC, and ROM 7 by AMSDOS sometimes). 6128 owners (because we're all so fab) can access slots 0-15, and so can use quite a few more ROMs at once. Either way, the main ROM identifier you'll come into frequent contact with is the ROM number (aka, slot number, ROM address, a king prawn chow mein with oyster sauce down our local Chinese, etc).

One more thing – if you're planning to write any foreground ROMs (don't ask – it's explained later), remember that on reset, ROMs are scanned from the outside in – so the further down the chain of add-ons the ROM box, the sooner it's scanned. This can be important when it comes to priorities of interrupting programs.

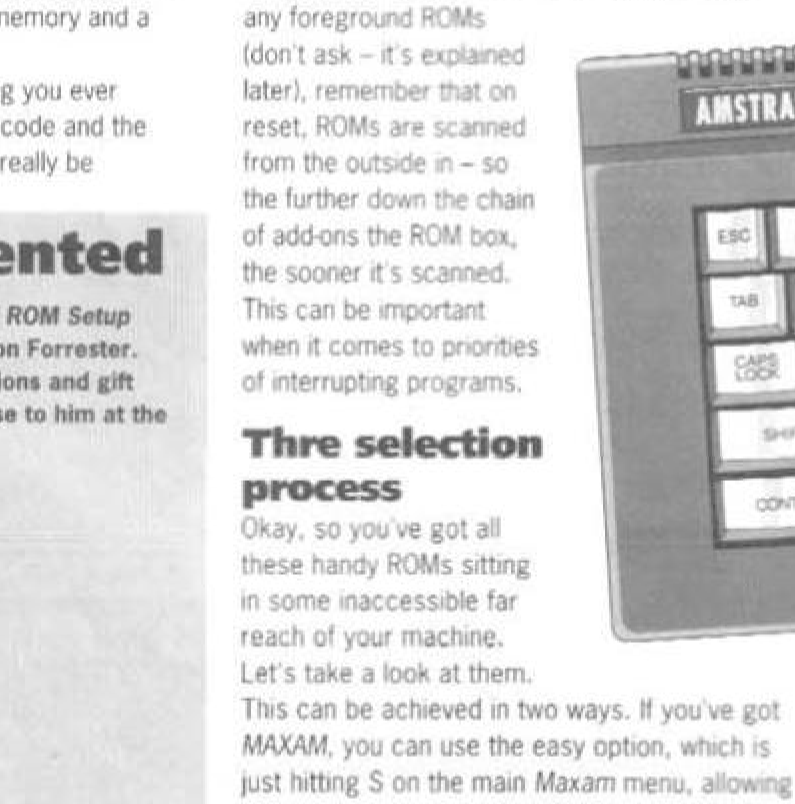


Thre selection process

Okay, so you've got all these handy ROMs sitting in some inaccessible far reach of your machine. Let's take a look at them. This can be achieved in two ways. If you've got *MAXAM*, you can use the easy option, which is just hitting S on the main *Maxam* menu, allowing you to select an upper ROM. You can then just choose to edit memory, and take a look at the contents of the ROM at &C000 as opposed to screen memory.

I'm going to assume, though, that some poor mortals don't have *Maxam* (and if not, why not? Turn to page 13 now to find out all about it) and give you a funky little machine code program that'll do the same kind of thing. Funnily enough, this program also introduces us to the first of our firmware calls:

```
9000  0E 01     LD C,&01
9002  CD 0F B9  CALL &B90F
9005  21 00 C0  LD HL,&C000
9008  11 00 40  LD DE,&4000
900B  01 00 40  LD BC,&4000
900E  ED B0     LDIR
9010  C9        RET
```



Here you can see the external commands set up by what's listed as the KDS ROM, but is actually called ROMDOS.

What that program has actually done is selected the ROM using a new firmware call, and copied it to a block of memory starting at &4000 and finishing at &7FFF. This has, in effect, stored a ROM image at &4000. The number of the ROM to be examined was held in the C register. The call in full:

&B90F KL ROM SELECT

- Action: Selects and enables an upper ROM.

- Entry: C contains ROM number.
- Exit: C and B contain previous ROM number and state.

Oh, and you may need to switch them out again, in which case give this a try:

```
&B918          KL ROM DESELECT
```

- Action: Selects previous upper ROM.
- Entry: C and B contain ROM number and state.

Access

When a ROM is selected, you want to access it. You can read bytes from a ROM at the address &C000, but when you attempt to write to it, the bytes will land in normal screen memory.

But that's boring, so let's probe it and get some more information. Assemblers out:

```
&B915          KL PROBE ROM
```

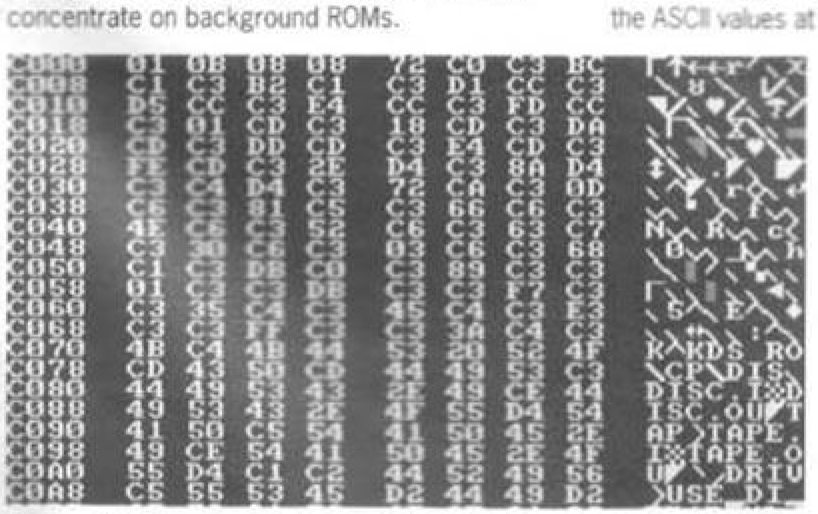
- Action: Gets class and version information from a ROM.
- Entry: C contains the ROM number.
- Exit: A contains ROM class, H contains version number, L holds mark number.

Which brings us on to the important subject of ROM classes. In normal usage, a ROM can have one of three classifications:

0 – Foreground
1 – Background
2 – Extension



Foreground ROMs kick in and take over the machine on reset, background ROMs are used for setting up RSXs, and extension ROMs are just used if you can't fit everything you want on to one chip. The extensions are not activated, merely accessible by other ROMs. For now, I'll concentrate on background ROMs.



Erm... This is, erm, what exactly? Oh yeah – it's a hexadecimal representation of the first few bytes of the ROMDOS ROM. If you look closely, you can see the ASCII characters of the commands, complete with last bit set on the last character.

Setting up RSXs

A common way to allow users to access ROM software is to make the ROM set-up RSX commands, such as |P to enter *Protext*. So let's get coding on a ROM command, that for now will just bleep (I'm not demonstrating how to write complex utilities, just how to set up the command). What follows is a breakdown of what the various lines do. You can find the final, complete, unabridged, uninterrupted by adverts version of the program in the box, Unfragmented.



And here's the command source code sitting in Protext, ready to be assembled by MAXAM 1.5 (another truly excellent ROM program).

```
ORG &C000
LIMIT &FFFF
WRITE "IMAGE.BIN"
```

```
DB &01
```

The ROM classification number.

```
DB &01,&02,&03
```

The version and mark numbers. This setup would read V1.23.

```
DW NAMTAB
```

A two-byte word pointing to the address of the command name table.

```
JP ROMINIT
JP BLEEP
```

The jump table – a list of jumps to the various routines (you could add another after our bleep jump, if you wanted extra commands).

```
.NAMTAB
DB "ROM INI","T"+&80
DB "BLEE","P"+&80
DB 0
```

The name table – the DB commands are poking the ASCII values at that memory address onwards, but adding **&80** to the value of the last character of each command (in effect, setting the highest bit), so the routine knows where each command starts and ends. The whole table is rounded off with a zero byte, to tell the CPC the name table has finished.

```
.ROMINIT
PUSH HL
PUSH DE
Startup Routine
POP DE
POP HL
SCF
RET
```

This is the start-up routine. It must be slotted on to the name tables at the first slot. It's commonly used to reserve memory for any routines within the ROM that may want a few bytes of workspace. This is achieved by lowering HL by the desired number of bytes, but for now, we're preserving it.

```
.BLEEP
LD A,&07
CALL &BB5A
RET
```

Finally, here's our tacky little bleep routine, which, when the ROM is plugged in, will make the computer bleep when the command |BLEEP is issued (stunning, huh?).

A less fragmented version of the program has been handily freeze-dried, shrink-wrapped and then had water pored on it, boiled for 15 minutes and reproduced in full for your convenience in the box headed Unfragmented (which could be anywhere on this spread if Andy gets into one of his, "I'm an artist!" moods).

Why bother?

That's a good question. But don't try to convince me that when you're using your computer, you never wish that BASIC had a few handy little extra features. You've never needed to format a disk, copy a file, or something along those lines? What about wanting to load a file into a really low address in memory without BASIC nagging you about HIMEM?

If none of this has ever happened to you, then good for you, but if you've ever wanted to customise your machine, and personally tailor some extra commands, then ROMs are definitely the way to go.

RAMROM

Just in case you haven't realised, you can actually test this month's code and begin to write your own ROMs with one very simple piece of kit – the RAMROM. If you want to know more about it, it's got a half-page devoted to it in the main feature (which starts on page 12), and is available for £19.95 from Avatar, 39 Crossfell Road, Leverstock Green, Hemel Hempstead, Herts, HP3 8RG ☎ 0442 251705.

The Pick'n'Kixx compo

10 sets of five storming Kixx games and T-shirts up for grabs in the AA lucky dip-type compo thingy.

We're not offering you one, we're not offering you two, we're not offering you three or even four games. Nope, we're giving you the chance to win five count 'em, FIVE Kixx games – their latest releases, in fact, to tie up with our bumper Kixx reviews round-up starting on page 44 – plus an incredibly smart, sassy, streetwise and, inescapably, blue Kixx T-shirt to wrap them all up in. And, spookily, the T-shirt doubles as an article of clothing as well.

If you're one of the 10 winners of this exclusive Kixx compo you will receive:

- *Rick Dangerous 2*
- *OutRun Europa*
- *AcroJet*
- *Final Fight*
- *Mercs*
- And, of course, that stunningly blue T-shirt.

I bet you're wondering what you've got to do to win these bundles now. It couldn't be simpler. First you've got to answer the three multi-choice questions, then you've got to come up with a tie breaker suggestion; but don't worry, it's not one of those boring think-up-a-rubbish-slogan things – check out the instructions below.



New AA Ed Dave, having just worked out that he's put his T-shirt on back to front, head butts a large hard structure in frustration. "Where did they get him from?" wonders Simon.



Part 1 – The questions

1 What was the game to which the excellent *Rick Dangerous 2* was a sequel?

a *Rick Dangerous*
b *Dizzy Prince Of the Yolk Folk*
c Ker-Plunk!

2 *Mercs* is short for...?

a Mercenaries
b Mission: Eradicate, Rectify and Consume Sausages
c Marks and Spencer's

3 The blue T-Shirt is predominantly...

a Blue
b Green
c Found in the inner regions of the rainforests of the Amazon basin.

Part 2 – The tie-breaker

This is where the Pick'n'Kixx bit comes in (and I bet you thought we called the compo that just so we could use that really crap pun). We want you to pick a couple of games, or three, or four if you're feeling really adventurous and combine them to create a new game with the sort of title you'd just love to see Kixx release. For example:

- *Super Scramble Simulator* and *Dizzy* become *Scramble Dizzy Simulator* (that's just wishful thinking – Simon).
- Or how about *Lotus Esprit Turbo Outrun*?
- You could always have *Bart Simpson versus The Addams Family*.
- And don't forget the classic hotel management sim *Room Service* (*Room 10* and *Silent Service*).

The only rule is that at least one of the games has to be a Kixx title, so to help you out we've printed a few at the bottom of the page to help you out. Aren't we nice people?

Part 3 – The sending-in bit

When you've worked out the answers to the questions and come up with a tie-breaker jot them down on the back of a postcard or sealed-down envelope and send the whole kit'n'kaboodle to: **Pick'n'Kixx Compo, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BL.**

Sorry but employees of Future Publishing, Kixx or the British Embassy in Papua New Guinea aren't allowed to enter, 'cos we say so.

A few Kixx titles to help you out with the tie breaker

3D Pool • AcroJet • Airborne Ranger • Barbarian 2 • Barbarian Ultimate Warrior • California Games • Championship Wrestling • F15 Strike Eagle • Ghouls and Ghosts • Go For Gold • Gunship • Heroes of the Lance • Indiana Jones and the Last Crusade • LED Storm • Moonwalker • Myth • OutRun • OutRun Europa • Rick Dangerous • Shadow Dancer • Silent Service • Saint Dragon • Street Fighter • Strider • Summer Camp • Super Monaco GP • Super Scramble Simulator • TechnoCop • Thunderblade • Turbo OutRun • Turrican • Vendetta • Vigilante

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- Western Digital 16-bit On-board S-VGA Chipset
- 256K Video RAM
- 14" Dual Sync Colour Monitor with Built-in Stereo Speakers
  PC Mode:
  Horizontal Frequency 31.5KHz
  Graphics Resolution 640 x 480 - 256 Colours
  Ad-Lib Stereo Sound through the built-in Speakers
  Mega Mode:
  Horizontal Frequency 15.65KHz
  Graphics Resolution 320 x 224 - 512 Colour palette
  Arcade Quality Graphics with Stereo Sound
- Sound Capability - PC Mode: Full Ad-Lib Sound Mega Mode: Full Mega Drive Stereo Sound
- 102-Key PS/2 Type Keyboard
- Dimensions - 325mm (w) x 78mm (h) x 292mm (d)
- External Interfaces - Parallel Port, Twin RS232C Serial Ports, PS/2 Type Keyboard Socket, PS/2 Type Mouse Socket, VGA Monitor Port, VGA Monitor Power Socket, PC Analogue Joystick Port, Two Sega Compatible Games Pad Ports, Mega Drive Cartridge Slot, Mega CD Connector Port, Stereo Headphones Socket.
- Power - 65W (110-240V Auto-Sensing)
- Supplied Accessories - PS/2 Type PC Mouse, Precision Analogue PC Joystick, Sega Compatible Games Pad
- Software - MS-DOS v5.0 + Amstrad Desktop Graphical Interface + Interactive Tutor (pre-installed)
- 12 Months On-Site Warranty

SYSTEMS INCLUDE:

VGA COLOUR MONITOR — 14" DUAL SYNC WITH BUILT-IN STEREO SPEAKERS
40Mb HARD DRIVE
1Mb RAM EXPANDABLE TO 16Mb Max.
3½" FLOPPY DRIVE
256K VIDEO RAM
AD-Lib™ SOUND CARD (COMPATIBLE)
PS/2 TYPE MOUSE
PC JOYSTICK PRECISION ANALOGUE WITH PC GAMES PORT
GAMES CONTROL PAD
FREE SOFTWARE: MS-DOS 5.0, AMSTRAD DESKTOP Pre-installed
12 MONTHS ON-SITE WARRANTY WITH NCR

The 'MEGA' PC 386SX 25MHz from Amstrad is the first system to offer two fully featured computer processors in one! A high-powered, IBM compatible 386SX PC and the very latest 68000 based Sega Mega Drive compatible 16-bit games console. A custom designed sliding front panel allows easy access between the PC and Mega modes. The system comes complete with a 40Mb IDE hard disk drive and a high resolution 14" dual sync monitor with built-in stereo speakers. The monitor automatically switches between Megadrive graphics with Stereo Sound and PC VGA graphics with Ad-Lib™ Sound. With a PS/2 mouse, precision analogue PC joystick and Megadrive compatible games control pad included, the Mega PC is brilliant for business and mega for games - the perfect computing solution.

MEGA PC 386SX 25MHz — 40Mb HARD DRIVE — 1Mb RAM 40Mb HARD DRIVE — **£599** +VAT = £703.83 Ref: AMP 1000

486SLC for £799 + VAT

92MHz — **MEGA PLUS**

INC VGA COLOUR MONITOR + HARD DRIVE



FREE! WINDOWS 3.1 PRE-INSTALLED — PC GAMES SOFTWARE: Wing Commander Special Edition, Life & Death II The Brain, Mavis Beacon Teaches Typing

LANDMARK v2.00 PERFORMANCE COMPARISON CHART

386SX 16MHz	386SX 25MHz	386DX 25MHz	386DX 33MHz	386DX 33MHz	386DX 40MHz	486SX 16MHz	486SX 20MHz	486SX 25MHz	486SLC 33MHz
20 MHz	25 MHz	31 MHz	47 MHz	51 MHz	66 MHz	54 MHz	67 MHz	84 MHz	92 MHz

Silica Systems are pleased to present an upgraded version of the Mega PC, called the Mega 'Plus'. This has been upgraded with the revolutionary 486SLC 33MHz CPU, manufactured by Texas Instruments and jointly developed with Cyrix. This chip is a 33MHz 486 instruction set compatible micro processor with a 32-bit internal data path, 1K internal cache and power management features. Power meter aggregate MIPS performance is increased by up to 2 times and it boasts an overall performance of 92MHz using Landmark's latest version Speedcom 2.00 benchmark. This is almost 3 times as fast as a 386SX - 25 CPU (see Landmark Speed Chart above). The 'Mega Plus' 486SLC 33MHz PC comes in two versions - 40Mb hard drive with 2Mb RAM at £799+VAT and 130Mb hard drive with 4Mb RAM at £899+VAT.

SPECIFICATIONS AS 386SX ABOVE, PLUS!

- Processor and clock speed, PC Mode: 486SLC 33MHz
- 2Mb or 4Mb RAM
- 40Mb or 130Mb IDE Hard Drive
- Maths Co-Processor Socket for 487SLC
- 512K Video RAM
- EXTRA FREE SOFTWARE: Windows 3.1 (pre-installed) Mindscape PC Games Pack: Wing Commander "Special Edition", Life & Death II "The Brain", Mavis Beacon Typing

MEGA PLUS 486SLC 33MHz

40Mb HARD DRIVE	130Mb HARD DRIVE
2Mb RAM 40Mb HARD DRIVE	4Mb RAM 130Mb HARD DRIVE
£799	£899
+VAT = £938.83 Ref: AMP 1020	+VAT = £1056.33 Ref: AMP 1134

FREE OVERNIGHT COURIER DELIVERY IN THE UK MAINLAND

Reaction

Send your letters to: Reaction, Amstrad Action, 30 Monmouth Street, Bath BA1 2BW

Power of suggestion

I am a subscriber to your magazine and in answer to your cry in issue 91 I have come up with some good ideas.

1 **I own a 464 and I have lots of games for it. My favourite is *Space Crusade*. My brother uses it for programming and loves your Type-Ins section.**

2 **I would like to see more French software on the CPC and loads more strategy games like *Space Crusade* and *HeroQuest*.**

3 **Please could you start reviewing or just do an article on the new Amstrad 486 Mega Plus computer, along with details of the software that's available for it, what it's capable of and if it's worth the money?**

4 **You could also do an article on the dearly-departed GX4000, what software it had and if it could have been the console to end them all.**

Daniel Lowbridge, South Humberside.

1 Er, I think you"ll find that's a statement, not an idea.

2 That's more like it. That's almost an idea. Maybe With a bit more practice...

3 There you are, you can do it. Er, but I think you should check out *PC Format*, not *AA*, if you want a review of that particular machine.

4 Three not very good attempts at suggestions and then you come up with a doozy like this one. It was so good we put it into action immediately. (Well, okay, we *have* been thinking about it for a while). **Dave**



Job satisfaction is so important. The wrong gun can ruin your week.

Put a plug in it

I have just found out why my printer hasn't been working for the past six months or so – the printer lead was plugged into the computer upside-down. And so with my new-found freedom I am writing to everyone I can, including you (so think yourself lucky).

I have a few points to make:

1 **You gits! You total gits. Why, oh why did you have to put *Tasword* and *Colossus Chess*, both of which I have already got, on the covertape? I haven't got many games and utilities, so I could not believe it when I discovered these two gems were being given away virtually free.**

2 **Also, I don't know about anybody else, but these music programs you keep putting on your covertape aren't much use. What the hell are they on about? With their steps, volumes, sequences, octaves, channels and envelopes (aren't they the things you use to post letters in?) they are just too much hassle to bother with.**

3 **Whatever happened to all those doss about articles such as Rod and that other bloke beating the crap out of each other after playing *Tag Team Wrestling*? Or those pictures of that Ken guy from Ocean doing a load of karate? Which reminds me, is Rod still there? Who is the editor now? Is Adam still there? How many Adams were/are there?**

4 **Where did the Basic tutorial section of Techy Forum go to, and what happened to the full commentary on one of the type-ins you promised us?**

Apart from these points, I think your magazine is superb and don't know what all this fuss is about the new logo – it's virtually the same as the old one for God's sake!

Chris Hatton, Warrington.

1 We did it just to annoy you.

2 If music be the food of love then you obviously don't like junk food (*I don't believe you just said that – Simon*). Sorry they weren't to your taste (*please, no more rubbish food jokes – I can't take them anymore – Simon*), but loads of people thought they were great. So there.

3 You'll never get any pictures of me dossing about. I work too hard to produce this wondrous magazine (*in between the business breakfasts, the long lunches, the early dinners, the working suppers and all the other snacks breaks – Simon*). No Rod isn't still here, he's become a book publisher. I'm the editor now, and there's been Linda 'indie chick' Barker and Tim 'Nozzer' Norris at the helm inbetween. There are no Adams here now, but we found 156 in the Bath Thompson Local alone.

4 Hopefully The Hairy Happening's recent series of Assembly Line features has fulfilled the same function. **Dave**

Mad, mad, mad, mad, mad, fish

You're mad! Yes, it's true, you're totally potty. "But why?" I hear you ask. (*I didn't say a thing! – Dave*). Ah, then I will tell you, sir. Ever looked at he captions under pictures in the magazine? Zany! Or on the first page of Reaction in issue 87, the box at the bottom, Deaf Poet's Society – those answers are barmy.

I've decided to list the most barmy people in the world:

- **Rod Lawton**
- **Simon Forrester**
- **Adam Peters**
- **Lam Tang**
- **Maryanne Booth**

But why Maryanne, I hear you ask? (*Look I keep telling you, I haven't said a word – I really think you should get your ears seen to – Dave*). Well, she must be pretty mad to like all those fluffy animals so much – puke-o-city.

Could you find Rod to answer the Reaction letters in an issue because he makes me laugh so much – well, with a beard like that who couldn't be amused?

Anyway, because of your madness and barminess, I have awarded you with a certificate. *Amstrad Action* I salute you.

Joe Hartley.

I see it as one of my duties as the editor of *AA* to carry on this long and great tradition of barminess. So, er, I'll say something barmy, shall I? Er... how about... let's see... I could always... um... well have you heard the one about the angler and the chessplayer watching the paint dry? They... (*zzzzzzzz – Simon*).



The certificate was presented by The Minister Of Funny Walks, Sir Runulf Feinnes

No supplies, but demand



We'd love to stick on our cover tape but we can't track down the author to get his permission. So, John Pickford, if you're reading this...

I am a regular reader of *AA* but I am very disappointed due to the lack of availability at WH Smith or any of the other newsagents in Sunderland. Over the last few months the service has been getting worse and the June issue hasn't even arrived, even though it's now time for the July issue. As WH Smith supplies most of the small newsagents there's no chance of obtaining a copy. It's not practical for me to obtain copies by post so I may stop buying *AA* if the copies are not there on time. I enjoy *AA* an would be sorry to have to give it up.
R Cobb, Sunderland.

Er, I'm curious to know why it's not practical for you to get your copy by mail – a large dog that chews everything that comes through your letterbox, perhaps? Anyway, if that is the case, I suggest you ask you newsagent to reserve a copy. You'll find the relevant coupon on page 8. Simple, huh? **Dave**

Mislead

I have a CPC464. I obtained last month's *AA* (June). I am one of those unfortunates who does not know anything about programming. I bought the mag because it had a type-in for my printer. This program enabled anyone to make their own posters. I carefully typed it out only to discover that it would not work on my machine. A friend told me later that the program was for 6128 machines only. I bought the mag especially for this program. Could you please, please in future say what machine each type-in will work on. Finally, could you tell me if there is any way that I can make it work on my 464?
Bill Buchanon, somewhere.
PS I have typed this letter using your excellent *Tasword Processor*. I hope the mag will continue for many years to come.

Look it wasn't my fault! I didn't do it! It wasn't me! I wasn't even there! It was Simon's fault! (I can blame everything on him – great isn't it?). Okay, fair cop guv. In future we will strive (great word that) to make sure that all listings state clearly what machine they are for. **Dave**

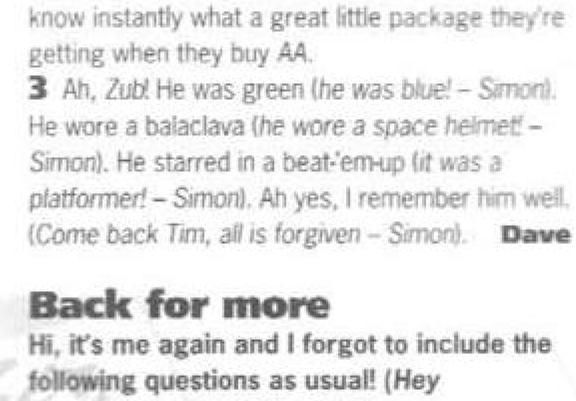
Maturing well

Hi, I'd just like to make a few comments about *AA*.
1 I've been reading AA since issue 1 and I feel that it has matured excellently. The early issues were very good, but now they're even more informative, and, as a whole, much better presented.
2 Why not scrap the cover tape and make it mail order, like the disks? As a 6128 Plus owner I'd feel a lot better, as it means I won't be wasting the covertape. Maybe you could add more pages instead and keep the cost of the mag the same.
3 Any chance of putting any of these classic games on the *Classic Collection*? *Zub*, *Barbarian* or *Sorcery*? Does anyone remember *Zub*?
You've never replied to me and I've been writing to you now and again since issue 1. Please reply!
Mark Adams, Swansea.
PS I also own an Amiga, but the games are mostly crap.

1 Aw, shucks, I hope the new team can keep up the good work, Mark.
2 Fair comment, but if we had nothing on the cover, then the casual shelf-glancer (that's a real demographic class, you know) might not know that there was anything on offer. Sure we could flag the fact that you could send away for a tape, but that's not as eye-catching or as convenient as having a tape on the cover. We want people to know instantly what a great little package they're getting when they buy *AA*.
3 Ah, *Zub*! He was green (*he was blue! – Simon*). He wore a balaclava (*he wore a space helmet! – Simon*). He starred in a beat-'em-up (*it was a platformer! – Simon*). Ah yes, I remember him well. (*Come back Tim, all is forgiven – Simon*). **Dave**

Back for more

Hi, it's me again and I forgot to include the following questions as usual! (*Hey existential, or what? – Dave.*)
1 Please can you print out an info box on the Amstrad GX4000, eg, how fast is it?
2 Since I just bought a GX4000 please can you save me a few pages and put some colour screen shots (as you do with new games) and also print what your review mark was out of 100 per cent?
3 What I meant in the last letter was, do new games now come mainly on tape or are there any new games coming out on disk?
4 Please hurry up with the GX4000 tape project.


Pro Tennis is compatible with a GX4000. A tape player or disk drive aren't. Okay?

5 If the GX4000 can run tapes can it run disks as well?
6 How much does the GX upgrade cost?
7 If the GX4000 can run disks how much does it cost?
8 An idea of mine: why don't you put as game or utility on tape one month and the same program on disk next month?
You are an excellent mag, all you need to know. Since I'm new to the CPC scene I really appreciate all your hard work. You really are an excellent, truly amazing mag.
Rahul Gindha, Stirlingshire.

1 I reckon that our feature on page 30 could just have the stuff you're after.
2 Check out answer 1.
3 Despite the fact that Titus has just released two games on disk, *Prehistorik 2* and *Super Cauldron*, it's far more likely that any new games

Chartwatch

Yes! They're back by popular demand. Well, by my demand anyway, and 'cos I'm the new Ed I can demand what I like. And I like readers' charts, so they're back. Or, at least, they will be when you start sending them in. But to kick things off here are our charts – anyway, it's as good a way as any of getting to know the new team (except for inviting us down to your local and buying us rounds all evening, which you can feel free to do if you want). Send your Top 10s to the usual Reaction address.

Dave's games Top 10

1	*Rick Dangerous 2*	Firebird
2	*Hard Drivin'*	Domark
3	*Burnin' Rubber*	Amstrad
4	*Rainbow Islands*	Ocean
5	*Myth*	System 3
6	*Space Crusade*	Gremlin
7	*Sim City*	Infogrammes
8	*Lemmings*	Pysgnosis
9	*Rick Dangerous*	Firebird
10	*New Zealand Story*	CodeMasters

Simon's games Top 10

1	*Prehistorik 2*	Titus
2	*Super Cauldron*	Titus
3	*Elite*	Firebird
4	*Bloodwych*	Imageworks
5	*Myth*	System 3
6	*Builderland*	Loriciel
7	*Burnin' Rubber*	Amstrad
8	*Chuckie Egg*	A'n'F
9	*Bombjack*	Elite
10	*Beach Buggy Simulator*	Silverbird

Andy's Top 5 Tunes

Andy O, meanwhile, being our resident rocker (*oi, make that punk rocker, I don't want 'em thinking I'm in to Bon Jovi – Andy*) has selected his top happening CPC soundtracks.

1	*Prehistorik 2*	Titus
2	*Super Cauldron*	Titus
3	*Cybernoid 2*	Hewson
4	*Head Over Heels*	Ocean
5	*Stormlord*	Hewson

released will be available predominantly on tape.

4, 5, 6 & 7 Oh, not this old chestnut again. Go away and leave us alone. As far as we're concerned we've never said you could connect a GX to a tape player. Where the hell did you get this idea from? Read my lips – ah, you can't... er well read this next bit that's in capitals to get the message across – IT CAN'T BE DONE!

7 We don't alternate between disks and tapes on the cover is because we want to offer everybody something new every month. **Dave**

Century celebrations

I would just like to say that *AA* is the best, your artwork is clear and well-suited for different games, ie, *Prehistorik 2* has cartoony pictures that go with the screenshots. Your reviews are funny and normally to the point except when Simon goes on about other things not even slightly related to the game, eg, the beginning of the *Prehistorik 2* review. The *Classic Collection* tape is normally good, the games are brilliant, my favourites being *Mystical* and *Contraption*, but the utilities are not always so good. *Racing Boxform* and *Instant Recall* are quite crap but *Tasword* is good and *BootTracker* is brilliant.

Next, about issue 100. I think you should make it a bumper issue, with maybe two or three covertapes full of games and a 100 pages filled with *AA*'s Top 100 or *AA*'s A to Z of games, golden oldies, funniest readers' letters, best type-ins and best PD games, and you can charge any price you'd like (I would pay anything up to £10 for it). I think other readers should write in and say what they would like in it and how much they would be willing to pay.
Paul Stevens, Eastbourne.

I really hate it when people don't stick to the point. As I was saying over breakfast the other morning, *Star Trek: The Next Generation* is just so dull. Why don't they have more shooting and big space battles? And hasn't Deanna Troi got weird hips? Sorry, where was I...

Nice idea for the 100th issue but a tad impractical, I'm afraid. I'd love to fill hundreds of pages whittering on about everything that's great about the CPC but I don't think everybody would pay a tenner to give me the privilege. But if you would, write in and let me know. **Dave**

Early morning blues

I'm a busy man, I don't have time for this. But then again, as a long term reader of *AA* who finds himself awake at some ungodly hour, with thoughts strangely turning to the subject of this letter, I shall, in the best traditions of all home computer nuts, go and sit at my keyboard at 3am. Not that I expect to see this one in print, because, I'm afraid, this one's going to hit where it hurts (*go on, give it all you've got, you don't scare us – Dave*).

Great, I thought reading about the forthcoming reader survey, but then it arrived, along with the realisation that it was printed purely for the staff of *AA*, who no doubt had the user instructions under separate cover:

1 Detach page, fold and cut in half.

2 Using sellotape™ apply to sides of head for use as blinkers.

Honestly! Let's make this a limited choice survey, and let's make the options really limited so that we can say the results are inconclusive or not viable. Oh, and let's surround the boxes in black so that (heavens forbid!) nobody can make the odd comment next to a question, and while we're on the subject, let's not have one of those stupid spaces at the bottom for other comments or constructive ideas.

Then I thought, Simply The Best, now here's a good idea, perhaps there will be a good pointer on which would be the best 3.5-inch drive to add to my 6128 (when I eventually get around to buying one), but how can you trust the verdict when, for instance, *Protext* (presumably because it's used at *AA*) is adjudged an outright winner without even a consideration for (the admittedly more expensive) *Brunword*.

Yet, take heart, it's not all bad, else I wouldn't still be buying the mag, would I? (After all it's the only one left to buy!)

Regards to Arnold (sack everybody who said, "Who?")
E R Brown, Warminster.

Believe me, if we hadn't had such a rigid structure for the survey, then we would have had a valid excuse to say that it was inconclusive and not viable. The tick-the-box-which-applies approach means that we can feed the results into a database so that the any trends there might be in your replies can be much more easily detected and analysed. I mean, we have had literally thousands of replies – can you imagine what a monumental task it would have been to go through all those if every person had written a sentence in reply to each question? Okay, I admit that the style of survey we used may not have seemed very personal, but it's better for everybody in the end, because it helps us produce the magazine you want. And if you do want to make a more detailed suggestion, you could always write to Reaction. Ah, you have. See, it works. **Dave**



U-turn

I was looking through my new copy of *AA* when I noticed something very strange about the photo of Tim Norris at the beginning of the Power Up section. It was exactly the same as last month's (and the month's before that, and the month's before that) except that Tim had been cut out and reversed. A few hints are the useless cutting out and the purple in Tim's glasses from the coat in the original picture. Very clever, Nick, but not good enough.
Duncan Worth, Belper.

Okay, so we didn't fool you, but wait till you see the amazing morphing effects that new Art Ed Andy O has used on poor old Tim in this month's Power Up. **Dave**

Ode to a greasy writer

Dear Simon

I send you these rhymes,
Not a moment too late,
In the much hope that I,
may perhaps win a date,
With *Amstrad Action*'s,
Very own Simon Forrester,
Wiser than a wise man,
With the looks of a chorister.

Give me Si as a prize,
Complete with crowning glory,
For I am the one,
Who does not think he's gory,
His rough and rugged looks,
Send shivers down my toes,
You may think I'm insane,
But here's a picture enclosed.
Loopy Lou (age 20), Southampton.

You might be surprised to learn that this letter was not written in crayon. And I must admit, I am bemused by some of the imagery, especially the 'crowning glory' – does she mean Simon's wig? It's so badly made out the cheapest materials – border collie, goat and worn-out shag pile carpets, I believe – it seems unlikely. **Dave**

Now this is more like it! Pity that you don't have any pupils or irises, isn't it? Ah well, nobody's perfect (*you'd know about that – Dave*). Oh yeah, I'll be at the UAUG convention thang in Southampton in October, so maybe we could...



No wonder she fancies Simon – she's blind. That's still no excuse for the Vogon-inspired poetry.

Wanted

WANTED for Amstrad CPC 464 Pac-Man on tape and 64K memory expansion pack, Advanced Art Studio, Genius mouse with interface. **Phone Ian (Perthshire) 0738 52859.**

SNOOPY, ATF and Dan Dare 3, tape or disk, any offers? Include P&P in asking price. Reasonable, good condition originals please. **Ian Smith, 3 Northlands Way, Tetbury, Glos GL8 8YT.**

PENPALS wanted to swap games, cheats, pokes, programs and views etc. Reply guaranteed. **Write to Gregor McBride, 17 Turleum Road, Crieff, Perthshire, Tayside PH7 3QF.**

ALL SORTS OF DISK GAMES wanted. Willing to pay near to £5 each. **Send to Maurice Clark, 7 Lucknow Street, Wanganui, New Zealand.**

ADLAN PROGRAM, Rombox and games, Sidewalk, Animated Strip Polka, disk or tapes. Reasonable price paid or swaps. **Alex Prentice, 57 Dobbies Road, Bonnyrigg, Midlothian, EH19 2AY.**

3.5" DISK DRIVE suitable for second drive for CPC 6128. Contact Nicholas Garvey, 20 Ballinaleck Lane, Poyntzpass, Newry, Co. Down, Northern Ireland.

WANTED URGENTLY, Bards Tale and Bloodwych for Amstrad CPC 464 cassette. Good price paid or will swap for other games. **Phone James on 0902 756347 weekdays only.**

AMSTRAD ACTION issues 1-44. All offers considered. **Phone James on 0452 520506 or write to James Durrant, 24 Saint Paul's Road, Glos GL1 5AR.**

LITTLE COMPUTER PEOPLE disk version wanted. Will swap for tape games or reasonable cash. **Phone Northampton 0604 411180 between 6pm and 9pm.**

WARZONE wanted for Amstrad 464. **Ring Colin 0908 566962 after 2pm.**

ELITE WANTED on disk with full instructions. Will pay up to £6 or will swwap F16 Combat Pilot on tape. **Phone James 0780 410455.**

EIGHT SOCKET Rombox for CPC 6128 preferably Superpower make, but may consider eight socket Romboard by Microgenic. Pay up to £12 inclusive of post. **Phone 0224 643131 evenings.**

WANTED Romboard with over four spaces and ROMS or EPROMS also Multiface II and CPC hardware in any condition. Will pay postage and reasonable price. **Phone Jeff 0684 273476.**

MELODEON, two row S/G wanted, suitable for Morris Dance Tunes. Swap for loadsa software, tape/disk plus other bits and peices. **Steve Lee, 48 Field Road, Ramsey, Cambs 0487 814043.**

PENPALL WANTED can be male or female, must be 11 to 14 years old. For 12 year old girl. **Write to Clara Stewart, 11 Burraness, Mossbank, Shetland 2E1 9TG.**

LADY AGED 56 wants penpals. Any age 13-60. I have an Amstrad 464 and would like to know more about the 464 and its workings. **Ms Nora Lees, 285 Franklin Road, Cotteridge, Birmingham B30 1NH. Tel 021 433 3860.**

SOFTWARE ON TAPE for Public Domain Library. All tapes will be returned a.s.a.p. **Mark Caldwell, 356 Kenley Close, Liverpool, 6 3BJ.**

BORLAND TURBO PASCAL wanted, any reasonable price paid. **Contact R Collier, 30B Kingston road, Bordesley Green, Birmingham B9 4JB.**

SCRAP CITIZEN 120D PRINTER required. I want a complete print head for spares. Willing to pay reasonable price. **Phone 0623 66022.**

FIENDISH FREDDY wanted desparately. **Write to Inge Botofte, Frederiksborgvej 25, DK-3600, Frederikssund, Denmark.**

SWAP AMSTRAD PCW system 8256 with printer and disk drive for Amstrad CPC 664 or 6128 with printer and disk drive for Amstrad CPC 664 or 6128 with colour monitor and £110 ono. PCW 8256 is ideal for businesses **0444 450454.**

AMSOFT CLASSIC Racing for CPC464 willing to swap DMP3000 printer which is still boxed. **Please write to Andrew Hudson, 5 Trocadero Court, Normanton Road, Derby DE1 2GR.**

MULTIFACE II WANTED cheap for CPC 6128. **Ring David on 0827 62126 after 5.30pm.**

SOFT 968 Firmware manual desperately wanted. Will pay up to £30. **Phone Keith 0590 643074.**

CPC 6128 keyboard assembly complete with disk drive. Need not be working but must be physically undamaged, not including outer case. **Phone evenings after 7pm or weekends 0272 607011.**

SIM CITY WANTED on tape (boxed) in exchange for Soccer Stars on tape (boxed). **Write to K Fish, 2 Watchet Close, Llanrymney, Cardiff CF3 9DY.**

3.5" DISK DRIVE with leads for Amstrad CPC 6128 required. **Phone Mike 0602 820112 (Nottingham).**

DOOMDARK'S REVENGE, Johnny Reb, Iron Lord (English version). Prefer disk but tape ok. Good prices paid. **Telephone Les 0753 651773 evenings or weekends. 081 754 3092 daytime Monday to Friday.**

IRON LORD, Rebelstar and Rebelstar 2 with instructions if possible. Will pay reasonable price. **Phone Rob Watson 0353 777006 between 3.30pm and 10pm.**

6128+ newcomer requires information on obtaining disks educational etc. also name of any reasonably east to follow book available on computing. **Phone Dawn 0246 865819.**

MULTIFACE II WANTED for 464+. Will pay up to £25 and postage. **Write to Michael Curran 28 Hilltown Grove, Swords, Co. Dublin, Ireland or phone 01 8403022.**

TIPS/CHEATS book £4. Adventurers tips/solutions book £4, map book £5. Include 50p P&P New World fo Magic PBM. **Send SAE to D Kiernan, 8 Shernstone Road, Edgbaston, Birmingham B16 0NU.**

RS232C SERIAL INTERFACE wanted urgently at cheap price. Also wanted user manual for Prism modem 2000. **Phone James 0734 733637**

Services

AMSTRAD, Atari ST home programmed software for sale. For a catalogue send 20p to **D Payne, 89 Wolverhampton Road, Codsall, Wolverhampton, WV8 1PL.** (if you want an Atari catalogue please send a disk).

TEXTSHEET 2 home programmed. Includes built-in spell checker. Send £2.50 and disk/tape to: **Derek Payne, 89 Wolverhampton Road, Codshall, Wolverhampton WV8 1PL.** Please make cheques payable to Alan Payne.

GX4000 parts for sale. Do you need a new case, switch, cartridge, flap or CPU? For cheap bits, **ring 0444 450454 ask for Matt.**

PD FUN has more than 20 disk sides full of games including Powertetris, Crystal Mission and hundreds more, **PD Fun, 41 Mitchelgate, Kirkby, Lonsdale, via Carnforth, Lancs LD6 2BE.**

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User Groups

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Power Up

The latest games releases reviewed and rated plus cheats and tips to help you out with old faves.

The time has come, but the moment has been prepared for, as the old AA crew regenerates Time Lord-style thanks to the latest hi-tec CPC morphing techniques...



Tim Norris becomes... Dave Golder

It was a fatal meeting that arch villain known only as The Publisher that spelt doom for Tim's portrayal of The Editor. The battle may have been lost but the war was not over. The Editor's featured blurred, rearranged themselves and ended up with the fizzog of this hunky dude. The new Editor was witty, intelligent, immensely popular, a great bloke... (*and an abject liar who's just written this rubbish – Simon*).



Nick Aspell hands over to... Andy Ounsted

Nick was whisked away by aliens from the planet Neen 10 Doh and replaced with a robot double. We didn't notice until one day the robot actually cracked a joke that made us laugh. That's when we worked out what had happened. We mounted a rescue, but Nick was fatally wounded. By the time we got back to Earth, he had regenerated into this aging juvenile delinquent with a love of motorbikes, punk music and Diana Rigg.



Simon Forrester... we're stuck with him

We did try to morph Simon into something a bit more resembling a human being, but the poor old office CPC Plus just couldn't handle all that hair. It coughed and spluttered a bit, then gave up. So the Simon we know and love is still with here, frightening small children and eating live oxen for breakfast. Still at, least he can still go down the local kebab shop and still get served his 'usual' without even having to ask for it.

Reviewed







Rick Dangerous

£3.99 ■ Cass ■ Kixx ■ 021 625 3388

When aliens land in Hyde Park, there is only one person who can save the planet – but Simon, The Hairy Happening™, was too busy so Rick D had to come out of early retirement.

Oh yes, very scary. Like I'm gonna be worried about a few green midgets? One shake of the ol' mop and they'll drop like anyone else (*that's cheating – you should use mines and bullets like everyone else – Dave*). Ho hum – s'pose so. This means that instead of just stomping through the game obliterating everything, I'm reduced, like other mere mortals, to relying on this Dangerous bloke. Great.



The atomic mud mines really do pose a bit of a problem, but experience helps.

There are four levels which you can leap straight into from the main menu. You have to complete all four of these in order to gain access to the final levels, but to begin with you have the choice of Hyde Park, the Ice Caverns Of Freezia, the Forests Of Vegetablia and the Atomic Mud Mines.

The basic aim of each level is to get through it, and progress to the next – that's all. So we're off to Hyde Park, attempting to gain access to the alien ship, and remove it from the planet Earth. First impressions are good – with sparks flying around, lasers zapping down, foot switches to turn off force fields, and, through it all, the incredibly cute Rick.

Cute is definitely an important part of this game, but it's only employed in the graphic style,



Rick is unavailable for opening supermarkets and fetes – he's fictional, you see.

and doesn't interfere with the gameplay (there aren't any yukky fluffy bunnies or – yuk – wimpy girlfriends to rescue – it actually enhances it.

That's pretty much the concept throughout the game, and as you progress further, you'll constantly be finding new things to kill or blow up, and you'll constantly be running up against new challenges which need puzzling out.

One problem with this kind of game is that the levels quite often end up pretty much identical, with only the graphics providing any discernible difference. This is definitely not the case with

Mercs

£3.99 ■ Cass ■ Kixx ■ 021 625 3388

Oh no – Simon's really browned off this time. After throwing the CPC clear across the office, he calmly hammered out his review, destroying a keyboard, a desk, and half a wall in the process.



If you want to defeat this end-of-level thingy, shoot it – it's in sight, you see...



Look, this is just getting really silly, okay? I'm going to make things really easy for all the programmers out there from now on. Here is the Simon Forrester definitive guide on how to write a scrolling bloke-killing-things game that'll actually pass review stage with flying colours. This guide was written with reference to a certain game who's name can be found elsewhere on the page (in very big letters).



Mercs is the kind of game where you have to run along shooting everybody in sight.

1 First off, always make sure you have a concept. A concept is an original game idea that separates £3.99's worth of cassette from the one next to it. Never, ever just place a man with a gun on hostile terrain and leave the rest to the player's imagination.

2 Consider the bad guys. You have a choice here – either place thousands of them in the game and make them ludicrously easy to kill, or just scatter a few around and add a little challenge. It would be nice.

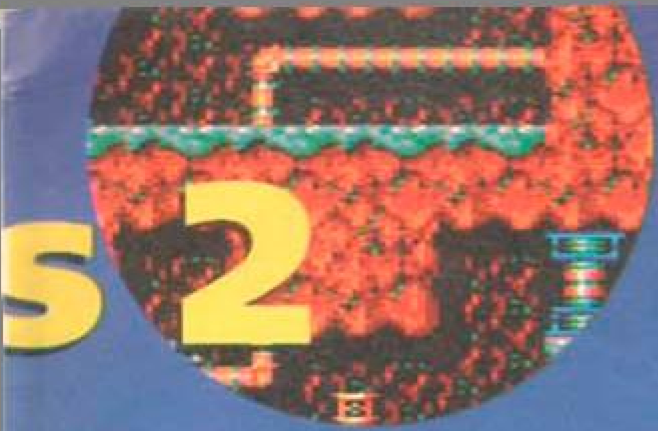
3 Difficulty is always an important factor. When a reviewer manages to complete the game on his first attempt (indeed, his first encounter with the game at all), you'll find that your final rating drops no end.

4 Obviously you will always have to restrict the player's access, keeping him on the main playing area, not allowing him to wander clean off the screen. This does not mean, however, that he should ever be incapacitated by an invisible barrier. It's cheap, and very tacky.



5 End-of-level guardians should be just that. Killing an end-of-level guardian should never be just as easy as everything else. If you simply add a large sprite and allow the player to kill it in a matter of seconds, the reviewer will most likely pass out.

6 Just a small point here, but people do own Plus machines. Plus machines do not have a



Rick 2. The ice caverns introduce flying jet skis, the forests see Rick mastering rolling boulders around and the mud mines incorporate a rather natty set of trolleys. But each level retains the same thread of gameplay that holds the whole thing together so effectively.

In fact, the only real down side to the whole thing is that when you encounter particular puzzles for the first time, timing can be incredibly problematic (especially in the Fat Guy's HQ, one of the final

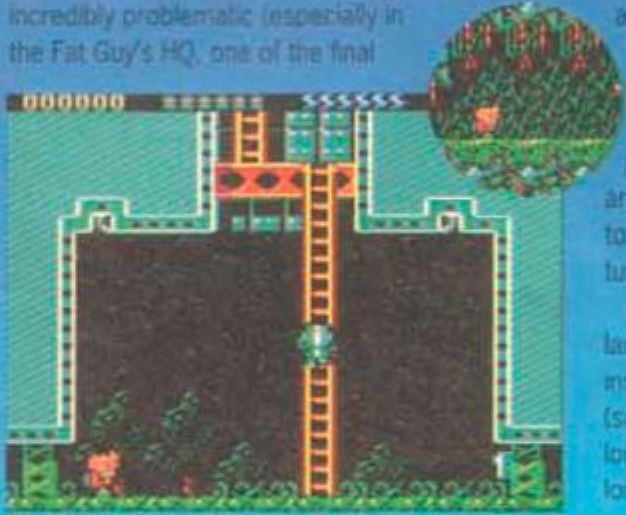


I think it's really saying something about today's society that you can be attacked by a snowball machine for no reason at all.

levels of the game). There will always be sections to the game that'll require huge amounts of luck as well as accuracy, as there are times you'll feel like you need the timing of the aliens you're trying so desperately to get rid of.

On the sonics side of things, we've got a game with some non-intrusive effects (which are often extremely helpful), nifty little intro ditties to each level and a wonderfully rousing marching tune to complement the title screen.

Grab factor and gameplay? *RD2* definitely lands in the higher end of the range, with its instant appeal of both cuteness and excellence (something we very rarely see these days), and long-lasting depth that gives the game a very long life indeed. On its original review, *RD2* scored a very high 97 per cent, and it was a mark that was well deserved. So now it's out at a budget price, it should get even more, right?



This game really does get complicated when circles from the jungle section start invading screens from other levels (you idiot – Andy).

Well, not quite. Sure, if you buy *Rick Dangerous 2* on re-release, you won't have wasted your money, and you'll get to experience a game you really should miss out on.

But from a reviewing point of view, every now and again you spot something that maybe could have been done better, or made easier but somehow the game manages to carry these imperfections well, adding character to Rick and his surroundings. To be fair it has dated slightly, and the puzzles are the type which irritate as many people as they intrigue, so, this time around, the score isn't going to be quite so ecstatic, but Rick is still a darned fine game. **Simon**

VERDICT

GRAPHICS 90%
Cute, well-drawn sprites with strong and imposing backgrounds.

SONICS 84%
They're all pretty good, but they tend to get on your nerves a bit.

GRAB FACTOR 92%
The game has an instant appeal drawing you in immediately.

STAYING POWER 93%
It does get harder, but gently, so as not to put you off later on.

RATING 90%

tape counter. Adding a software tape counter (Firebird style) would probably be a Very Good Thing.

7 The general public is intelligent (okay, if you've ever watched Beadle's *About* you might have your doubts, but nevertheless I stand by my statement). They will notice when the terrain and playing style of each level (bar about two) is identical, even if you have tried to disguise the fact with a few graphical tweaks.

8 Try and keep some kind of logic to barriers. This means you should never have a scenario in which the player is perfectly capable of strolling up a cliff approximately the same height as them but cannot step over a knee-high steel loop. It's just not cricket.

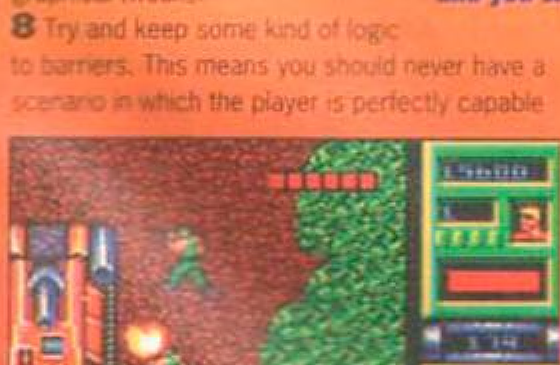


Oh God... You just shoot things, okay? They run along, and you shoot them. I don't know what else to tell you!

9 It's usually assumed that the player's character is intelligent, and knows what a brick wall is. This doesn't mean it should to do all the playing for you and refuse to bump into the walls, just that he shouldn't stick to them when he does – he should turn and walk parallel to them instead. Programmers with a psychological aversion to intelligent diagonals never get far.

10 If you put an open doorway in a building, or a wide archway in a burnt-out wall, please make sure the player can walk through – what's the point in drawing it if he can't?

I could be here all day, so you'll have to use your imagination for the rest of it. Don't get me wrong – *Mercs* isn't the naff game of the century, it's just a run-of-the-mill romp with a few too many bad points. **Simon**



There are three things in sight, so shoot everything in sight. Shoot, shoot, shoot!

VERDICT

GRAPHICS 57%
Badly drawn, garishly coloured, and totally unconvincing sprites.

SONICS 40%
Abysmal spot effects – enough to make you stop shooting totally.

GRAB FACTOR 55%
Moderately interesting for about the first 30 seconds or so.

STAYING POWER 35%
Holds about as much long-Term appeal as a rotting haddock.

RATING 47%

AcroJet

£3.99 ■ Cass ■ Kixx ■ 021 625 3388



"The escape routes are in the ceiling and duty free will not be served."

Danger! Beware low flying aircraft. Okay, so we're only talking about pixilated planes in a computer game here, but the danger is real enough. Prolonged exposure to *AcroJet* could seriously damage your sleeping



Yes that's a very impressive array of dials, but can you just tell me the time?

pattern; your body clock'll be convinced that you've been asleep for the last few hours.

If you're looking for a flight sim with a difference *AcroJet*, in concept, seems promising. The gimmick is that you have to compete against other pilots, flying your jet through a series of tricky manoeuvres, trying to impress the judges with your stylish execution and, more importantly, trying not to crash.

Y'see, these manoeuvres are all low level which makes them very tricky – you even have to fly under ribbons suspended between pylons. There are 10 different manoeuvres and you can compete in a decathlon, a pentathlon or a single event. There's even an option called 'Unlimited Event' in which you define the manoeuvres.

AcroJet is one of those sims that you have to spend hours, days, maybe even weeks mastering, and, frankly, it doesn't reward the effort. It's what you might call a worthy game – it's got more



Yes! A whole flight sim review and not one, "Chocks away, Ginger!" Darn! Blown it!

options than maths multi-choice exam paper, it's fast and the controls are responsive – but ultimately the thrill you get when you complete the manoeuvres and wrack up impressive scores just isn't very... well... thrilling. It rates about as exciting as watching GMTV during a power cut (which is marginally more exciting than watching it when there isn't a power cut).

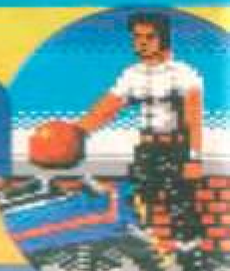
The graphics are functional, but hardly inspired, and some of the option screens are especially lacklustre, pretty much like the game itself. Don't get me wrong – *AcroJet*'s no turkey, and flight sim fans will probably love the different slant it gives to their favourite genre, but it's not going to convert any unbelievers. **Dave**

VERDICT

GRAPHICS Functional, but uninspiring	70%
SONICS Is that an engine or a crowd?	40%
GRAB FACTOR It never really takes off (groan).	51%
STAYING POWER Could do with a lot more variety.	75%

RATING

OutRun Europa



£3.99 ■ Cass ■ Kixx ■ 021 356 3388

There's been loads of fuss about whether violence in video games corrupts the 'youth of today'. As far as I'm concerned, the jury's still out on that one, but one thing's for sure – if sociologists ever prove that driving sims do have an effect, *Death Race 2000* could be reassessed as a startlingly accurate, apocalyptic vision of the future. Take, for example, *OutRun Europa* – the underlying socio-political metaphor seems to be drive like a maniac and kill everybody else on the road.

The protagonist is a senior operative from Unit 6 (whatever that is), who has to chase some thieves who've swiped the briefcase he's supposed to be taking to Berlin. The chase takes



Calm seas. Blue skies. No ferries. You're not telling me that's the English Channel.

place through several countries using all manner of high-speed transport – motorbikes, jetskis, Porches, power boats and Ferraris.

When you're on wheels, a press of the Fire button gives you extra acceleration. You'll need it, because there are time limits on each section. You only have enough fuel for a few of these extra boosts, but, as luck would have it, there are loads of fuel canisters scattered around just waiting to be picked up.

For some reason the police object to this kind of behaviour and will arrest you given half a chance, so don't give 'em one (or even half of one, come to that). Zoom past them with a press of your Fire button or bump them off the road.

The action is fast and, indeed, furious, though the scrolling chugs occasionally. The background graphics are excellent and the variety of scenery and the different vehicles keep the game fresh (disguising the fact the gameplay actually changes very little). The controls are muddy and slow to react at times, but once you get used to them they don't pose too many problems. The major minus point is that when the police nab you you get sent all the way back to the start of the level.

OutRun Europa is no classic, but it's well worth purchasing for a test drive. **Dave**

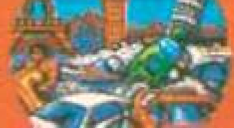


He's never going to catch those thieves if he keeps stopping for a bit of 10-pin bowling.

VERDICT

GRAPHICS Really rather exceptionally good.	90%
SONICS They're useful but not stunning.	70%
GRAB FACTOR The initial impact is powerful.	80%
STAYING POWER But it does get a bit samey.	75%

RATING 76%



Cheat Mode

All change at Cheat Mode this month as hacking supremo Phil Howard departs to pastures new while Lee Rouane tries to fit into some rather smelly size nines...

TURBO THE TORTOISE

Oh dear folks. Two Issues ago we promised you the cheat for this excellent platformer, but as we all know, tortoises are notoriously slow at getting to their destination. But now it's arrived, so here it is in all it's glory.

```
JAFJ 1·'·Turbo·the·Tortoise·-·tape
AAJH 2·'
EAEF 3·'·by·ANDY·PRICE
AALH 4·'
GAFD 5·'·infinite·lives
AANH 6·'
OAIN 7·'·Good·programmers·write·their·ow
     n·code,
MANB 8·'·They·don't·steal·other·people's.
AAAI 9·'
EAKN 10·DATA·3E,00,CD,0E,119
FAAA 20·DATA·BC,CD,75,00,1FE
EAIK 30·DATA·06,00,21,81,0A8
EAII 40·DATA·00,11,00,30,041
EABO 50·DATA·CD,77,BC,21,221
EABO 60·DATA·00,98,CD,83,1E8
FAED 70·DATA·BC,CD,7A,BC,2BF
EALL 80·DATA·21,8E,00,22,0D1
EANN 90·DATA·73,98,C3,00,1CE
EALN 100·DATA·98,11,81,00,12A
FAHC 110·DATA·1A,B7,C8,CD,266
EAJP 120·DATA·5A,BB,13,18,140
FAIA 130·DATA·F7,41,6E,64,20A
EAHO 140·DATA·79,20,50,72,15B
FAAA 150·DATA·69,63,65,0D,13E
FACB 160·DATA·0A,00,3E,FF,147
EAOP 170·DATA·32,8F,58,32,14B
FACB 180·DATA·57,5E,C3,60,1D8
EAEM 190·DATA·80,00,00,00,080
DAHF 200·RESTORE·10
NAHK 210·n=·4:a=&50:l=·0:WHILE·l<·200:GO
     SUB·22:WEND:GOTO·260
MALF 220·cs=0:FOR·x=1·TO n:READ·v$:v=VAL
     ("&"+v$):POKE·a,v
LAEH 230·cs=cs+v:a=a+1:NEXT:READ·c$:c=VA
     L("&"+c$)
OAEK 240·IF·c<>cs·THEN·PRINT"Data·error·
     in·line·",l:END
EACH 250·l=l+10:RETURN
EAOC 260·MODE·0:CALL·&50
```

Multiface Pokes

588F,FF
5E57,FF Infinite Life (do both pokes)

RICOCHET

Isn't it amazing how keypress cheats are always really obvious? Pressing TAB at any time during the game will allow you to advance a level. This cheat was a Tony Parker presentation, brought to you by your monthly AA.

POPEYE 3

Ugugugagag (*are you sure the new job's not too much for you? – Dave*). Andy Price has brought out his best pipe of spinach for this listing to make Popeye even more Invulnerable than ever. (*Er, you're either invulnerable or not, you can't be more invulnerable – Dave.*) Pedant! (*It's my job – Dave.*)



"And now I shall attempt to eat a can of spinach while my pal recites the alphabet."

```
FAEH 1·'·Popeye·3·-·tape
EADF 2·'·by·ANDY·PRICE
GAKD 3·'Infinite·Energy
AALH 4·'
DAHM 10·DATA·06,00,11,00
EAHK 20·DATA·94,cd,77,bc
EAPD 30·DATA·21,88,13,cd
EABN 40·DATA·83,bc,cd,7a
EACG 50·DATA·bc,21,6a,00
EAFD 60·DATA·22,b1,13,c3
DAGO 70·DATA·88,13,21,73
EAEH 80·DATA·00,22,9f,fe
EAPM 90·DATA·c3,00,fe,af
EAHJ 100·DATA·32,2c,2f,c3
EAMI 110·DATA·d0,bf,00,00
EADH 120·FOR·x=&50·TO·&79
FALJ 130·READ·a$:a=VAL("&"+a$)
HABP 140·POKE·x,a:chk=chk+a:NEXT
GAAE 150·IF·chk<>&11E7·THEN·170·
EAOC 160·MODE·1:CALL·&50
HAJF 170·PRINT"Error·in·poke"
```

Multiface Poke

2F2C,00 Infinite Energy

STEG THE SLUG

Hotfoot from the Bronx of Lowedges in Sheffield come all the passwords for CodeMaster's slimy wriggler, *Steg The Slug*. Tony Parker is wholly responsible for these and he also asks if I would say," Hello!" to his girlfriend and partner in hacking, Donna Packer. Consider it done, Tony.

Passwords

Level 2: **RDNUHCCMGU**
Level 3: **EDDUTIOCKO**
Level 4: **HDPFUVLCCM**
Level 5: **ODQMFUVLIC**
Level 6: **MEBHETPIAG**
Level 7: **LECGODTRHK**
Level 8: **NEDGFLDVRL**
Level 9: **OEFVHAGHLV**
Level 10: **PEGTTHIGLD**

SWORD OF THE SAMURAI

I suppose I'd better not let you lot do all the work. So, to prove I can hack it with the best of 'em here's a POKE I concocted for Zeppelin's budget *Shinobi* clone for Infinite stuff.

```
IADI 10·'Sword·Of·Samurai·Cheat
FANP 20·'Zeppelin·Games
GADA 30·'Infinite·Lives
JAMD 40·'Lee·Rouane·For·Cheat·Mode
AAMK 50·'
JAFD 60·DATA·3E,01,CD,0E,BC,21,4B,BF,CD,
     40,BF,21
JAEF 70·DATA·71,BF,CD,40,BF,CD,18,BB,3E,
     01,CD,6B
IAMO 80·DATA·BC,21,4A,BF,11,AC,8A,01,C8,
     00,06,01
JAOG 90·DATA·D5,CD,77,BC,E1,CD,83,BC,CD,
     7A,BC,21
JAMC 100·DATA·38,BF,22,E5,8A,C3,AC,8A,3E
     ,00,32,31
JAOD 110·DATA·36,C3,00,70,7E,FE,00,C8,CD
     ,5A,BB,23
IACP 120·DATA·18,F6,30,0F,02,53,77,6F,72
     ,64,20,4F
IALM 130·DATA·66,20,53,61,6D,75,72,61,69
     ,20,43,68
IAGM 140·DATA·65,61,74,20,2D,20,4C,43,52
     ,20,27,39
```

Are you befuddled by listings?

Don't panic! There's a full explanation of how to type in listings and what the codes at the beginning of each line mean in the Type-ins section which starts on page 26.

```
IAPO 150·DATA·33,0D,0A,0A,00,0F,03,49,6E
     ,73,65,72
IAJK 160·DATA·74,20,54,61,70,65,20,26,20
     ,50,72,65
IAIO 170·DATA·73,73,20,41,6E,79,20,4B,65
     ,79,20,2E
FABN 180·DATA·2E,2E,2E,07,00,*AA*
IAOA 190·chk=0:x=&BF00:MEMORY·&8AAC-1
JAID 200·READ·a$:IF·a$="*AA*"·THEN·230·E
     LSE·210
GAMC 210·a=VAL("&"+a$):POKE·x,a
HABN 220·x=x+1:chk=chk+a:GOTO·200
GADB 230·IF·chk<>&3718·THEN·250
DAAA 240·CALL·&BF00
LAKA 250·PRINT·"Data·Error·Old·Bean·....
     ":END
```

Multiface Poke

3631,00 Infinite Lives

DEAD OR ALIVE

As a special treat to any western fans out there, here's an infinite everything listing for that golden oldie shootie, *Dead Or Alive* penned by the chap in Matlock with the chimpanzee face and the monk haircut...

```
HANA 10·'Dead·Or·Alive·Cheat
JALA 20·'Ginormous·Compilation
JAML 30·'Infinite·Lives,·Bags·&·Ammo
JAMF 40·'Lee·Rouane·for·Cheat·Mode
AAMK 50·'
FAOO 60·DATA·3E,01,CD,0E,BC,21,45
FAIK 70·DATA·BF,11,10,27,01,00,19
GAEB 80·DATA·CD,32,BF,CD,1C,3E,21
FAHM 90·DATA·4D,BF,11,1E,30,01,00
GADB 100·DATA·69,CD,32,BF,3E,00,32
FAHO 110·DATA·B0,52,3E,00,32,4C,51
FADP 120·DATA·3E,00,32,D6,50,C3,48
GACD 130·DATA·3F,3E,01,CD,6B,BC,06
GAPE 140·DATA·08,D5,CD,77,BC,E1,CD
GABC 150·DATA·83,BC,CD,7A,BC,C9,6C
FAON 160·DATA·6F,61,64,65,72,20,20
FAKN 170·DATA·63,6F,64,65,20,20,20
CAFF 180·DATA·20
HAOJ 190·x=&BF00:READ·a$:a=VAL("&"+a$)
HANG 200·POKE·x,a:x=x+1:CALL·&BF00·
```

Multiface Pokes

52B0,00	Infinite Lives
514C,00	Infinite Bags
50D6,00	Infinite Ammo

TITUS THE FOX

Is there no stopping this man? Dunstable's (only!) notorious master hacker Andy Price helps foxy little Titus find his dream girl. Ah, if only it worked in real life *(but life ain't that easy, chum – Dave)*.



You know, this caption writing lark's a real doddle, you've just got to be sure it fits in t...

```
HAHH 1·'·Titus·the·Fox·-·disk
EADF 2·'·by·ANDY·PRICE
DAJH 3·'·255·Lives·
DABM 4·'·255·Energy
AAMH 5·'
EAJP 10·DATA·06,08,21,b4,be
EAIM 20·DATA·11,00,50,cd,77
FADC 30·DATA·bc,21,00,70,cd
FACM 40·DATA·83,bc,cd,7a,bc
FAFA 50·DATA·21,9d,be,22,29
```



Titus was having trouble finding someone suitable to play Juliet opposite his Romeo.

```
EAHJ 60·DATA·70,c3,00,70,21
FADC 70·DATA·ab,be,22,12,01
EAIM 80·DATA·3e,c3,32,11,01
FAMC 90·DATA·c3,40,00,cd,7a
FALF 100·DATA·bc,21,7a,1f,36
FAHE 110·DATA·ff,c9,64,69,73
EAGN 120·DATA·63,2e,62,61,73
FAJJ 130·FOR·x=&BE80·TO·&BEBB
FAMJ 140·READ·a$:a=VAL("&"+a$)
HACP 150·POKE·x,a:chk=chk+a:NEXT
GAOB 160·IF·chk<>&17D5·THEN·200
IAMG 170·CLS:PRINT"Insert·disk,·";
JAHF 180·PRINT"then·press·any·key"
FAEJ 190·CALL·&BB18:CALL·&BE80
HADF 200·PRINT"Error·in·poke"
```

Multiface Pokes

1F7A,No	No=Number Of Lives
2147,No	Do Both Pokes
2011,No	No=Number Of Energy Bars

DJ PUFF (TAPE)

No Cheat Mode would be complete without a POKE from the master hacker himself, good old Uncle Phil – his memory lives on. *(I'm not dead! – Phil.)*

```
EAMO 10·'DJ·Puff·Cheat
FAGJ 20·'By·Phil·Howard
```

THE GREAT ESCAPE – THE COMPLETE SOLUTION

For all those budding birdmen of Alcatraz out there (hang on, he never escaped, did he? – Dave), here's the complete escape plan as formulated by Colin Mulholland...

Day 1

- Move to the watchtower and collect the key from under it
- Move to where the tool kit is found and use the key to open door
- Drop the key and then pick up the tool kit
- Go to the door where you'll find the SPADE and open it (the door that is, not the spade)
- Find and collect the TORCH and the PAPERS
- Take them to the room where you found the SPADE a couple of steps back
- Drop the TORCH and PAPERS down the tunnel
- Return to your normal duties...

Day 2

- Find and open the RED CROSS parcel
- Drop contents of parcel on to the floor
- Return to your normal duties...

Day 3

- Follow the same procedure as DAY 2
- Return to your normal duties...

Day 4

- Find the WIRE CUTTERS that should have been in the RED CROSS parcel
- Take the WIRE CUTTERS to the room where the tunnel is
- Now drop the WIRE CUTTERS down the tunnel
- Return to your normal duties...

Day 5

- Find and open the RED CROSS parcel
- Drop the CHOCOLATE from the parcel on to the floor (litterbug – Dave)
- Return to your normal duties...

Day 6

- Find and open the RED CROSS parcel
- Take the COMPASS out of the parcel
- Now take the COMPASS to the room where the tunnel is
- Descend into the tunnel taking the COMPASS along with you
- Find and pick up the torch
- Take the COMPASS and the TORCH to the other end of the tunnel
- Drop the COMPASS and return to start of tunnel for the WIRE CUTTERS
- Return with the WIRE CUTTERS to where you dropped the COMPASS
- Drop the TORCH and pick up the COMPASS and then wait a few seconds
- Now run up to the WIRE and cut it using the WIRE CUTTERS
- Drop the COMPASS outside the wire and return to the tunnel
- Drop the WIRE CUTTERS (but you'll still need them later) and then pick up the TORCH
- Return to the start of the tunnel and pick up the PAPERS (getting exciting, isn't it?)
- Take the PAPERS to where you dropped the WIRE CUTTERS
- Now stay down the tunnel until next morning

Day 7

- Wait down the tunnel until you hear the alarm for roll call
- Now run up to the wire and cut it using the WIRE CUTTERS
- Drop the WIRE CUTTERS beside the wire
- Go through the wire and then pick up the COMPASS so you can get your bearings
- Now run off the screen. Congratulations, you have escaped (just don't go and impale yourself on barbed wire after a mad motorcycle chase, okay?)

THE MIGHTY MULTIFACE POKEMANIA ZONE

Polish up those red buttons and dust off those unbeaten games as Alex Cochrane, Archie Fulton, Carl Surry and Andy Price even up the odds against those naff game players out there (me included!). The initials after the game indicate who penned which cheats. Go get 'em.

Game	Format	Poke, Address	Effect
Fruit Machine Sim (AC)	Tape	908B,64	Infinite credits
		8E5A,0E	15 nudges in box
		8E5B,0E	15 10p's in cash box
		8E5C,FF	25:50 in party time
		8E5D,FF	255 nudges in bank
HeroQuest (AC)	Disk	3D24,00	Able to search room more than once
		3D25,No	Where No is the number of moves
Return of the Witchlord (AC)	Disk	39EF,00	Able to search room more than once
		39F0,No	Where No is the number of moves
Contraption (AC)	Tape	5EC9,C9	Infinite Lives

Game	Format	Poke, Address	Effect
Out Run Europa (AP)	Disk	0E7E,No	Where No is the number of boosts
		0E86,FF	255 credits
Baby Jo (AF)	Disk	2BFB,B7	Food stays on screen
		18AD,B7	Followed by...
		169C,B7	Infinite speed
Chevy Chase (AF)	Tape	24E7,00	Infinite time
Lotus Esprit Turbo (AF)	Disk	3A61,00	Infinite Fuel (Player 1)
		2686,00	Infinite Fuel (Player 2)
		417D,No	Where No is the qualifying position (1 Player)
		4161,No	Where No is the qualifying position (2 Player)
Tai Pan (CS)	Tape	2914,00	Stops date changing
Double Dragon 3 (CS)	Tape	247B,00	Infinite coins in shop
		1A2B,B7	Infinite coins in fight
Prehistorik 1 (LR)	Disk	4236,00	Infinite energy
		3219,A6	Infinite lives
		26C8,00	Infinite time



Our new Ed used to be a paperboy but one day it rained and he went all mushy.

```
GACI 30·'255·Shots,·255·Lives
HAKI 40·'1·Rec·Left·To·Collect
AAMK 50·'
FABK 60·DATA·3e,ff,32,79,07,32
FACD 70·DATA·01,07,3e,01,32,38
EABD 80·DATA·1a,c3,00,03
GAAD 90·DATA·3e,bf,32,cd,96,c3
CAAP 100·DATA·82,96
FAFH 110·FOR·x=&BF00·TO·&BF17
FAXL 120·READ·a$:a=VAL("&"+a$)
EANP 130·y=y+a:POKE·x,a
BAEP 140·NEXT
FAMC 150·IF·y<>2207·THEN·190
DAIJ 160·MEMORY·&2000
EAIC 170·LOAD·"DJ-PUFF"
DAEA 180·CALL·&BF10
GAPI 190·PRINT·"data·error"
```

How to POKE with a Multiface

1 Make sure you've got a Multiface – it helps.
2 Load the game as normal.
3 Press the RED button on the MULTIFACE.
4 Press 'T' for tool.
5 Press '*' to make sure you select the code.
6 Press 'H' for HEXADECIMAL input.
7 Press 'SPACE' for input.
8 Type in the ADDRESS (which consists of four characters, ie 3A7C).
9 Type in the POKE (two characters ie. A7)
10 Press 'RETURN'.
11 If there is more than one POKE then go back to step seven.
12 Press 'ESC' back to the menu.
13 Press 'R' to return to the game.

Multiface Pokes

0779,FF	255 Shots
0781,FF	255 Lives
1A38,No	Where No=Number Of Records

PAPERBOY 2

A crafty little one this time for that great deliver-'em-up, *Paperboy 2*. For some reason, the programmer disabled the keypress before the game's release, so two multiface POKEs are needed to initialise the keypress. Anyway, enough of this waffle, the POKEs are : A774,91 and A775,A7. You will now be able to hold down the keys SHIFT,1,0,G,H any time during the game for Infinite Lives and Infinite Papers.

BABY JO

Another smashing, great, super POKE sent in from a certain Mr Price in Dunstable. Hmm, now where have I heard that name before? (*Memory span of a goldfish, or what? – Dave.*) This time round it's the terror of the tots *Baby Jo* that gets the souping-up treatment (and, no, souping-up isn't what he does all down his bib after feeding time.



I never wanted to be a writer... I wanted to be an Editor, swinging from mag to mag.



Okay, okay, it's not actually a scene from Baby Jo. Instead, it's a clip from The Baby-Eating Slime From Mars. Honest, it is.

```
FAHA 1·'·Baby·Jo·-·disk
EADF 2·'·by·ANDY·PRICE
FADP 3·'·Infinite·Lives
GAAN 4·'·Infinite·Rattles
AAMH 5·'
FACA 10·DATA·21,89,be,22,4d
EAHM 20·DATA·51,c3,2d,51,21
FADD 30·DATA·92,be,22,9c,0d
EAEP 40·DATA·c3,00,0d,21,a0
FAJC 50·DATA·be,22,4a,11,3e
EAAN 60·DATA·c3,32,49,11,c3
EAOP 70·DATA·2d,11,21,d6,3e
FAEJ 80·DATA·cd,ce,3e,3e,03
FACA 90·DATA·21,00,97,cd,b3
FAPC 100·DATA·3e,af,32,82,15
FAFD 110·DATA·32,ee,26,c3,57
EAPH 120·DATA·11,00,00,00,00
FAPI 130·FOR·x=&BE80·TO·&BEB8
FAMJ 140·READ·a$:a=VAL("&"+a$)
HACP 150·POKE·x,a:chk=chk+a:NEXT
GAPB 160·IF·chk<>&152D·THEN·260
MALP 170·PRINT"Insert·disk,·then·press·a·key"
GALB 180·CALL·&BB18:RESTORE·230
JALL 190·OPENOUT"ap":MEMORY·&D7F:CLOSEOUT
GACO 200·LOAD"bloader.dc",&D80
HAPN 210·MODE·0:BORDER·0:FOR·x=0·TO·15
GADN 220·READ·y:INK·x,y:NEXT·x
GAPD 230·DATA·00,00,03,06,06,16,15,00
GAKE 240·DATA·13,00,09,19,00,02,14,26
DAIA 250·CALL·&BE80
HAJF 260·PRINT"Error·in·poke"
```

Multiface Pokes

1582,00	Infinite Lives
26EE,00	Infinite Rattles

...and there's more where they came from next month.



MasterCalc the tutorial, part 2

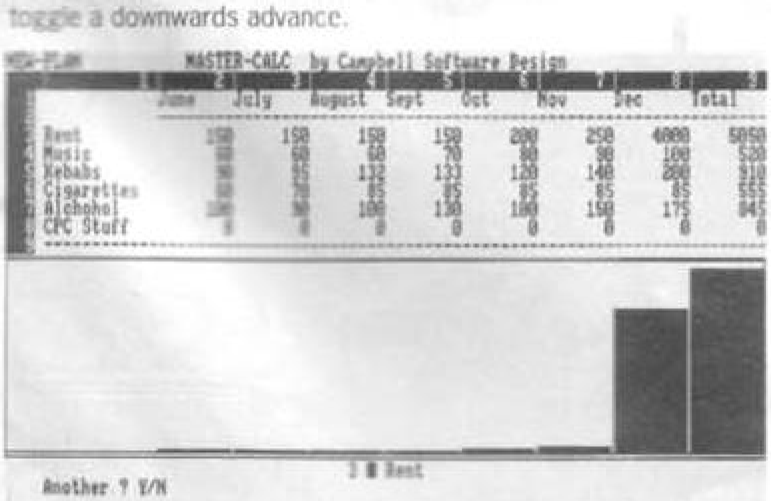
We're a philanthropic bunch here at Amstrad Action. Not only do we give away the best CPC software on our covertape, we also tell you how to use it. But sometimes the programs are just so huge the instructions won't fit on the tape pages alone. Such was the case with MasterCalc. The solution? Simon gets another two pages to wibble on about the darned thing.

When you loaded up *MasterCalc* last month, we bet you liked what you saw. Even though what we told you about the program in the tape pages was the bare bones, that info forms the basics of what you need to know for any complex spreadsheet. But *MasterCalc* has hidden depths; there are strange and mighty powers just waiting to be unleashed – and all you need to know to unleash them is the right key-presses, basically. And they're what I'm just about to reveal. By the end of this article you'll be spreadsheeting like you've been been doing it all your life... maybe.

Cursor Movement

The arrow keys move the cursor around the spreadsheet. This can get a little tedious at times though, so there are a few extra keypresses provided. First, to move to the far left of the sheet, press L. To get to the top of the sheet, press the up arrow key (right next to CLR). If you want to get to the top-left cell, though, you can just hit H.

Finally, you may get a tad peeved at having to move the cursor into the next cell time after time when you're entering huge amounts of data. To overcome this problem, hitting CTRL and R toggles a right-hand advance, and CTRL and D toggle a downwards advance.

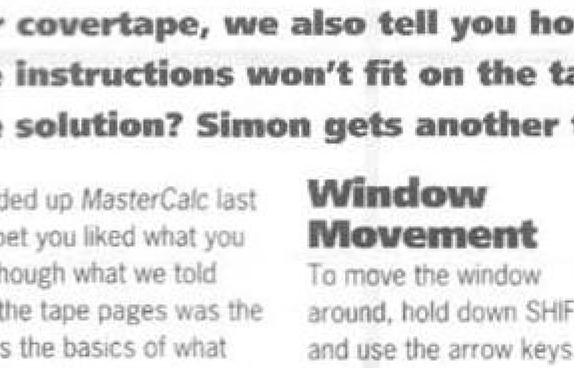


But it's grabs like this that make it all worthwhile. That's right folks, 'cos we do it all just for you at home (bleugh).

Window Movement

To move the window around, hold down SHIFT and use the arrow keys. When you do move the window around, though, the top two rows and the left-hand columns will hang around on-screen as the odds are they'll contain column and row labels, and you might want to see them when looking at other parts of the sheet.

Right. This is where everybody should stop reading because it gets technical. No – you don't understand. Stop reading. You're still going, I can see you. Look, just stop, or you'll regret it. Okay, but you were warned...



Why have I sat here explaining keypresses when it's all on this grab the whole time?

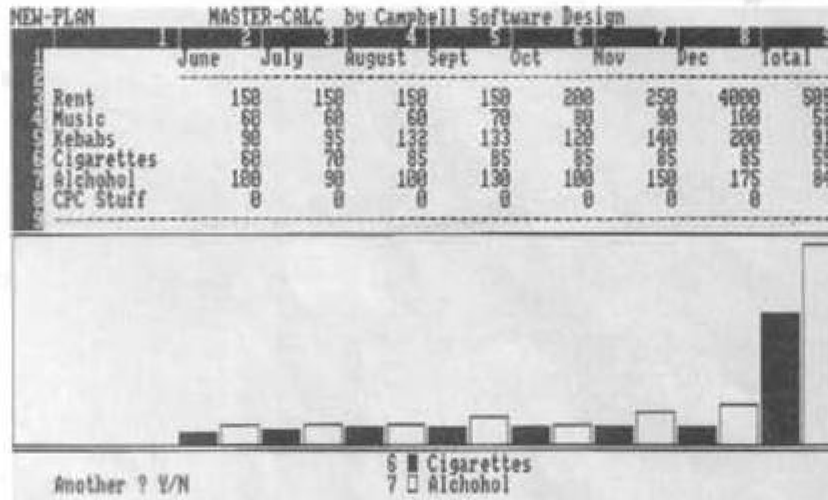
One thing you might like to do is overlay columns. This sounds technical for one good reason – it is. Right – move the cursor to column 6. Press the letter O, and give the column number 20. The screen should now display columns 1-5 and 20 onwards.

Window Split

Press S. Scary, huh? Press S again. Aaah, that's better. Press S again (*What, again? – Dave*). This is split window mode. To toggle between the two views, hit W. This is dead handy for keeping one part of the spreadsheet on screen while you work on another.

Mode Change

Press M. Press it again. And again. Just one more time. I think we've all managed to work out what that does...



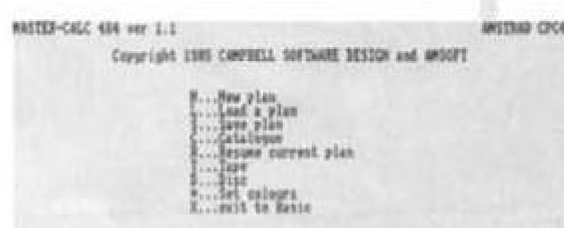
All you do is enter loads of numbers, and somehow the CPC makes sense of it all! Isn't modern technology marvellous?

Copying Data

When you're entering stuff into cells, and you want to repeat yourself from cell to cell, just hit SHIFT and 6. Spreadsheetarama! (*Methinks your attempts to brighten this up have failed – Dave*).

Clearing Data

If you want to clear a row, column, or even a single cell, hit CTRL and Z. Press C for a column (I can't believe I'm telling you this), R for a row (as if you couldn't suss this out for yourself), or E for an entry (at least that last one was a little more challenging).



It's things like this that can really ruin your faith in magazines... I do worry, you know, I really really do worry quite a bit...

Free Memory Space

To find out how many bytes of free memory are available to you from within the program, hit CTRL and S.

Inserting And Erasing

You need to insert a column? Press CTRL and A. Press Y (it's easier if you don't ask me why), and tell it whether you want a row or a column, and whereabouts you want it. (Continued on next page →)

Quick guide to keypresses

Aren't we nice to you? You don't even have to look at the on-screen help any more. Instead, you can simply keep this *AA* by your CPC:

Single key presses

- C .... Get column
- F .... Use formula
- H .... Home in window
- L .... Left in window
- M .... Change mode
- O .... Overlay at column
- R .... Get row
- S .... Window split
- T .... Define total
- W .... Window select
- & .... Repeat value
- ↑ .... Top of window
- " .... Enter text
- NUM .... Enter value

CTRL and...

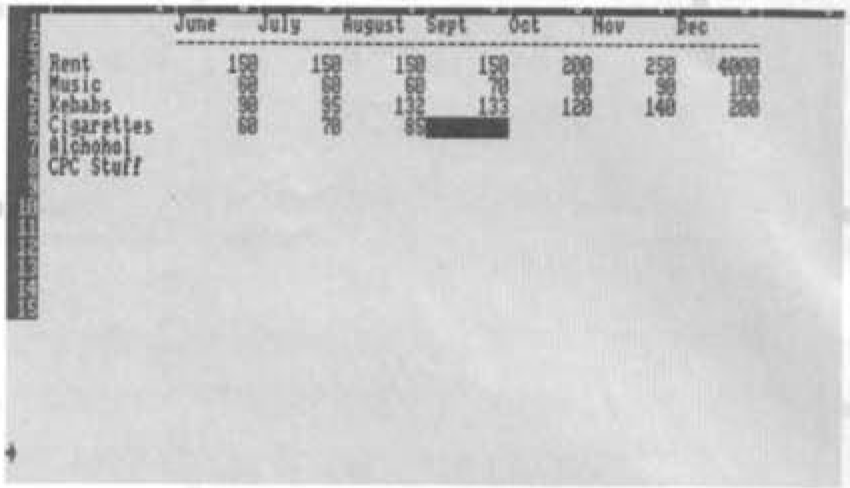
- A .... Alter size/format
- C .... Recalculate
- D .... Toggle auto cursor down
- F .... Formula options
- G .... Graphic histogram
- H .... Home in plan
- K .... Show this menu
- P .... Print
- R .... Toggle auto cursor across
- S .... Show spare bytes
- T .... Show total/formula usage
- X .... Top menu
- Z .... Clear row, column, or cell

Titling Your Plan

Press CTRL and A again, but this time, hit N in answer to the array size question. You will then be prompted with:

Width/Dec pl/ Commas/Title

So hit T, give the program a title, and thank western technology that you could.

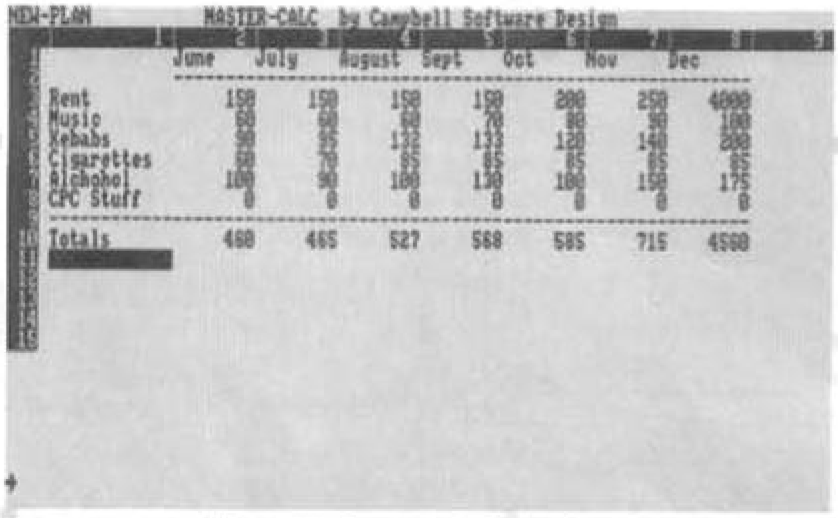


	June	July	August	Sept	Oct	Nov	Dec
Rent	150	150	150	150	200	250	4000
Music	60	60	60	70	80	90	100
Kebabs	90	95	132	133	120	140	200
Cigarettes	60	70	85				
Alchohol							
CPC Stuff							

Hold on a mo... Do you mean to say we actually pay Andy to use this kind of empty grab with only a little bit of text at the top?

Formulae

Oh Lordy no! (*Yes, yes, yes! – Dave.*) Oh please no! I'll write this bit, and be flooded with reader calls on it from the on-sale date until my life ends! (*Come on Simon, a man's got to do what a man's got to do – Dave.*) I'll still be answering calls on this when I've left *AA* and become games reviewer on *Sony Calculator Plus*! You can't do this to me –



NEW-PLAN MASTER-CALC by Campbell Software Design

	June	July	August	Sept	Oct	Nov	Dec
Rent	150	150	150	150	200	250	4000
Music	60	60	60	70	80	90	100
Kebabs	90	95	132	133	120	140	200
Cigarettes	60	70	85	85	85	85	85
Alchohol	100	90	100	130	100	150	175
CPC Stuff	0	0	0	0	0	0	0
Totals	460	465	527	568	585	715	4560

As you can see... (Hang on – have you taken a close look at the details Simon's actually fed into this spreadsheet? Are those figures in pounds? Can't be. I'm sure I don't pay him that much – Dave).

my phone will melt! (*I think it's about time we reviewed your contract – Dave.*) What? Oh... formulae – fabulous things.

A formula is an expression used to compute a value. Up to 99 formulae can be managed by this package. An example formula looks like this:

R5C12*1.15

I could leave it at that, but I'm not that horrible. It actually means 'the value in row 5 column 12, multiplied by 1.15'.

You don't have to specify everything, though. If you wanted, you could just specify a row or column, and enter formulae for a whole column or whole row.

I s'pose you'll be wanting to enter them, now, won't you? Right.

Hit CTRL and F. You'll be prompted:

New/Amend/Erase

We're going to hit N to specify a new formula. You'll have to enter a formula reference number, and then your formula.

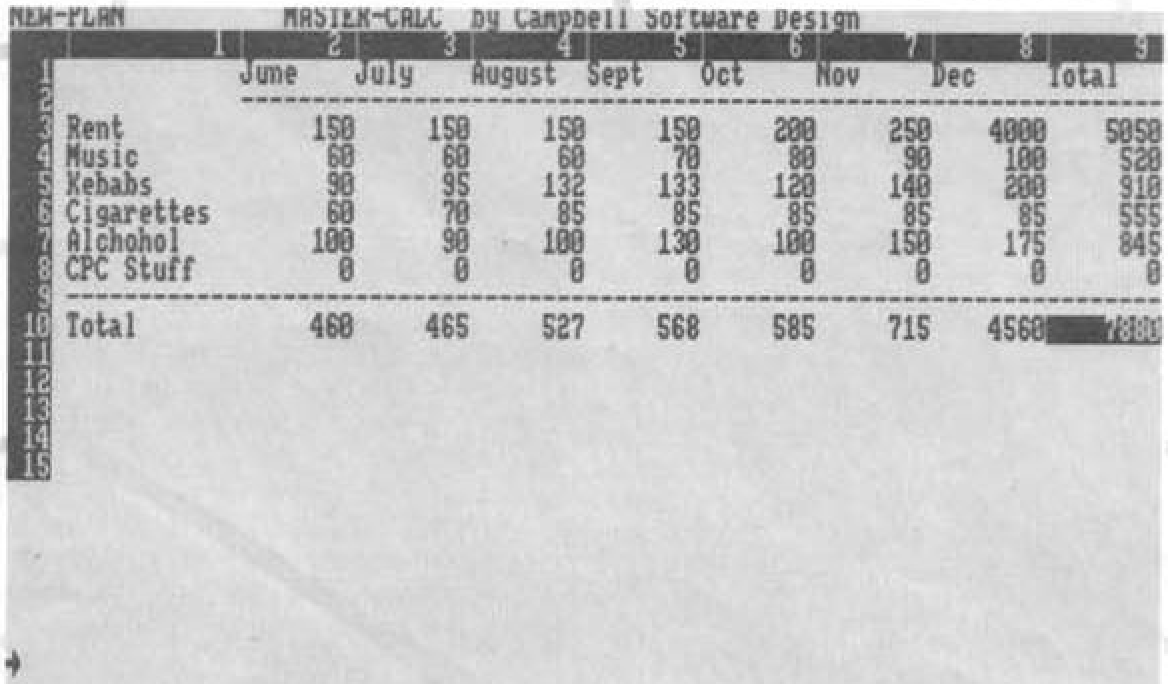
To erase a formula, all you have top do is hit CTRL and F again. Then hit E, specify a formula number and confirm with Y.

To make use of a formula, move the cursor over the cell you want to place the formula in, and hit F. You will then be asked for a formula number, which you need to state, and that's all there is to it!

If you didn't understand this last section, re-read it again, and please make sure you're positive about being uncertain before ringing in – we won't be able to help you all that much more than we already have.

One more thing, though – to see which cells have formula attached, hit CTRL and T.

Oh yes – and finally, to view figures on the spreadsheet, open your eyes and TAKE A LOOK AT THE FLIPPIN' SCREEN! (*Calm down, Simon, it's all over now. You can go and have a long lie down now – Dave.*)



NEW-PLAN MASTER-CALC by Campbell Software Design

	June	July	August	Sept	Oct	Nov	Dec	Total
Rent	150	150	150	150	200	250	4000	5050
Music	60	60	60	70	80	90	100	520
Kebabs	90	95	132	133	120	140	200	910
Cigarettes	60	70	85	85	85	85	85	555
Alchohol	100	90	100	130	100	150	175	845
CPC Stuff	0	0	0	0	0	0	0	0
Total	460	465	527	568	585	715	4560	7880

Now that's what I like to see – a few healthy totals. Okay, given the categories, maybe not so healthy totals, but hey – at least they're numbers, and it's something to write about, so just get off my back, okay? I didn't ask to be in the public eye! I've had enough. I'm offski!

Reference

If you're having hassles coping with the whole concept of spreadsheets, we recommend you take a look back at the feature in issue 93 – it contains quite a bit more generic information about what spreadsheets are, and how they work. And if you haven't got *AA99* you can order back issues using the form on page 56, so you've got no excuses, okay?

The Examiner

When all else fails, use a short piece of chalk is my motto. Unless you're playing an adventure, that is, in which case turning to Debby Howard's round-up of adventuring tit-bits is much more useful.

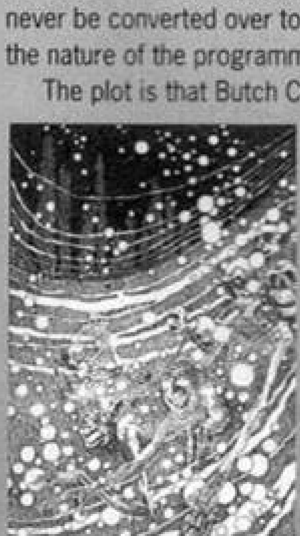
THE ADVENTURER'S — CHRONICLE —

Dream On
WoW software have just released another adventure by the prolific Peter Clark. This time, instead of being restricted to disk only, *A Midsummer Day's Dream* has been written using *Graphic Adventure Creator* so tape users can play it as well.

Seven years old
Adventure Probe, the adventuring fanzine has just celebrated its seventh birthday. Quite an achievement for a small publication. Every month it is packed with clues, maps, letters and, recently, quite a few competitions. It is well thought of in the adventuring world; if you have never read it, it's worth a look. For a sample copy send £2 (payable to *Adventure Probe*), to *Adventure Probe*, 52 Burford Road, Liverpool, L16 6AQ.

Radical departure
Famed PD *Eve Of Shadows* author Rob Buckley is in the process of setting up his own software company, Radical Software. One of his first projects is a humungous adventure called *Butch Cowardice, The Undersea Adventure*. It uses up both sides of a disk, and features over 30 graphics. Unfortunately it looks as if it will never be converted over to tape because of the nature of the programming.

The plot is that Butch Cowardice and a mad professor (a necessary accessory in any true adventure) voyage in a sub-atomic submarine to the missing undersea world of Atlantis, only to find that the way back is fraught with difficulties.



Come on, admit it. Voyage To The Bottom Of The Sea is rubbish.

I understand from Rob that Butch's sales performance could affect future projects. Sounds ominous. I'll be reviewing it soon as soon as I get my mits on it to let you know whether it's worth the tenner that Radical's asking for it.

On the move
Talking of Public Domain adventures, Adventure PD have passed all of the adventures in their library over to Adam Shade at London-based Dartsma. Contact 47, Kidd Place, Charlton, London SE7 8HP

A matter of convention
The fourth annual Adventurers' Convention will be held on Saturday 23rd October 1993 in Birmingham. It's basically a chance for adventure fans to get together, and natter on about all things adventurous. There will also be an awards ceremony and a chance to buy the latest adventures. The tickets are priced at £8.00 each. If you are interested send for a booking form write to The Adventurers' Convention, 128 Merton Hall Road, Wimbledon, London, SW19 3PZ. Enclose an SAE for details, which will include instructions on how to make nominations for the awards.

Tupperware appeal
Any seasoned adventure hack is bound to have come across Simon Avery's work – he's one of the best writers on the adventure scene today. If not, then you're really missing out on a treat. Simon's work has been converted from the Amstrad to many of the other 8-bit machines.

But, boo, hiss, Simon's turned traitor. Lured by the promise of extra memory he's decided to concentrate on the PC side of things, so it looks as if we are going to lose him. His first project I understand will be, *A Day In The Life Of A Tupperware Salesman*. I'm sure that if enough of you write to Simon to express your concern perhaps we can change his mind. If not, then thanks anyway, Simon, for all the stuff you've written.

Lords & Ladies of Adventure



If you're stuck on a game listed below, these kind souls are willing to help you. Please remember to enclose an SAE with your enquiry and DON'T ask for a full solution, as you'll probably be disappointed.

- Most Amstrad adventures – Joan Pancott ☎ (0305) 784155 between 1pm and 10pm
- *Adult 2, Can I Cheat Death?, Dungeon, Firestone, Jason & The Argonauts, Spacy, Tizpan, Welladay* – Stuart Mainland, 2 Douglas Road, Coylton, Ayr, KA6 6JJ.
- *Avon, Forest At World's End, Hollywood Hyjinx, Kobyashi Naru, Mordon's Quest, Scapeghost* – Angela Allum, 22 Point Royal, Bracknell, RG12 7HH.
- If you've finished an adventure and are willing to help out other weary wayfarers who have fallen by the, er, wayside, then you can become a Lord or Lady. Nope, we don't send Simon around with a sword and give you half of Cornwall to do with as you will, but we will print your name and the adventure you've beaten in this section so that a) you can show off and b) people can ring you up for advice. Write to Lords and Ladies, *Amstrad Action*, 30 Monmouth Street, Bath, Avon BA1 2BW.

Letters



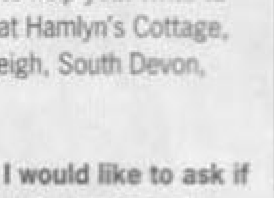
Have you ever heard of a game called *Dark Sceptre*? My friend has it and says that it's an excellent adventure. But I have never seen it mentioned anywhere. Is it worth buying, and if so, where can I find it?
D Nicholas, East Yorkshire.

Your friend must be a bit confused. *Dark Sceptre* is not an adventure but an arcade game similar to *Dun Darach*. Why don't you try Simon Avery's Adventure Finder service, I believe he may be able to help you. Write to him (don't forget SAE), at Hamlyn's Cottage, Old Exeter Road, Chudleigh, South Devon, TQ13 0DX. **Debby**



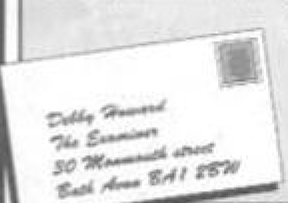
I would like to ask if you can help me with the game *Five On A Treasure Island*. How do you open the box from the wreck? And how do you get down the shaft under the bushes in the Courtyard, to rescue Timmy?
Mark (Pugwash) Strand, Southampton.

I'm happy to help Mark. Once you have the box, take it back to the mainland and drop it out of the Attic window. To rescue Timmy, wear the oven gloves to pull back the bushes to find Timmy. Once you have done that, become Dick and go down the well taking the torch with you. **Debby**



I acquired a 64K CPC in January, and intend to update it in the future. This is the first time that I have tried one of these adventure games and... I've got as far as sending a letter to you. So here it is... Help! Is there anywhere I can learn more about playing adventures?
Stephen Motherway, Birmingham.

There have been several publications written about adventuring but the most recent is Dave Havard's *A Beginner's Guide To Adventuring*. As the title of the book suggests it has been written with the novice adventurer in mind, but as a more experienced adventurer I found it a very useful as reference guide nevertheless. The book costs a mere £3 and is available from Atlas Adventure Software, 67 Lloyd Street, Llandudno, Gwynedd, Wales LL30 2PY. Make cheques and postal orders payable to Atlas Adventure Software. **Debby**



Give Us A Clue

Unfortunately, Lionel couldn't make it, Una was tied up with the West End revival of *No Jokes Please, This is A Farce And They're The Lowest Form Of Comedy Known To Man* and even Michael Aspel was having his bags removed. But never fear, because they don't know anything about Amstrad adventuring anyway. But Jonathan Hoey from Co. Down and Malcolm Dowse from Co. Dublin do. So let's have a big hand for them. And the first title is... a book... five words...



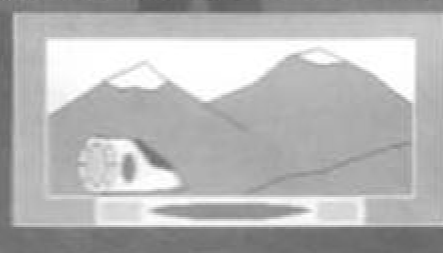
Five On A Treasure Island

- To get the oven gloves become Julian and be in the sitting room. Turn on the radio but when Joanna comes in tell her to give to gloves to Anne.
- The torch is in the dark room under the stairs and the batteries are in the clock in Aunt Fanny's room. When you put the batteries into the torch they become one item so do this immediately to save space.
- The candle is in the chest in the attic and the matches are under the bed in the spare room (you must examine the bed to reveal them). You can only carry four things at a time so drop everything you get in the sitting room.
- The rope is in the tool shed. To get it, go into Uncle Quentin's study, open the French windows and go west into the back garden. The tool shed is then north.
- Buy the ices and give them to George.
- The key for the gold room is hidden under the matting.
- Remember to collect a gold bar, as you'll need it later on in the game.
- Wait in the cavern (to the far south of the room) for the men to come and then lock them in with the gold.
- Just Dick can slip by the slab in the well and only George can row the boat to Kirrin Island. You'll find the game sticks to the books quite a lot through your travels.

Yarkon Blues

When you're playing an adventure, you can often get stuck trying to find the right verbs or adverbs to type in – should you 'enter' or 'go in'? Don't panic – the following list should help you with any synonym problems you might be having in *Yarkon Blues*: attach, author, bend, break, catch, change, climb, close, cross, cut, dig, drink, drop, eat, empty, enter, examine, exchange, feed, fill, fire, get, give, hit, hold, hook, in, insert, into, inventory, jump, kick, light, look, make, melt, move, no, offer, open, panic, pay, pick up, play, press, pull, push, put, read, say, sell, shoot, shout, shut, smash, swim, swing, talk, teleport, throw, tie, to, toss, unlight, unlock, wait, yes.

You'll also find it mighty useful to use 'un' directly in front of other verbs. Give it a try.



Oh, how handy – a remote mountain, miles away from any human contact, and there's an electronic map lying around! That's what I like to see – believable plots.

Where To Go!

If you're looking to buy the latest adventures, here's a couple of places from which you can get new and re-released software. If you send them a stamped self-addressed envelope, they'll send you their latest catalogues.

- WoW Software, 78 Radipole Lane, Weymouth, Dorset, DT4 9RS.
- The Adventure Workshop, 36 Grasmere Road, Royton, Oldham, OL2 6SR.

Back Issues

Sold out! Issues 1-65, 67-74 ● Still available get Issues 66, 75-95



Issue 88: Two complete games on the tape – *Tankbusters* and *Penguins*. Inside, *Videomaster, Robin Hood: Legend Quest* and *Crystal Kingdom Dizzy* reviewed.



Issue 89: Inside – Buyers' Guide to disk drives, a look at CPC-stretching demos and *Crazy Cars 3* reviewed. Plus! Wriggler and three great utilities on the covertape.



Issue 90: The world's hugest collection of Multiface pokes (more than 478 of them). On the tape: *Steve Davis Snooker* (full game) and *LARA* (m/code utility).



Issue 91: All the dirt on who's doing what in the CPC world. Hackit black box of tricks reviewed. On the tape: *Tasword* (word processor) and *Colossus Chess 4*.



Issue 92: Just how do those floppy disc things work? Plus a review of the first 3.5 inch A: drive. On the tape: *BooTracker* (music utility), *SYNTAX* and *Balloon Buster*.



Issue 93: 101 interesting things to do with business software. Reviewed: *Super Cauldron*, Amstrad Pen Pad. On the tape: *Racing BoxForm, Mystical, Balrog*.



Issue 94: The very best software and kit for your CPC. *Prehistorik II* reviewed. On the jolly old tape: *Instant Recall* (database), *Contraption*



Issue 95: *Street Fighter 2* progress report. *Trakers* reviewed. A brief history of the computer game. And in loadable form on the tape: *MasterCalc* and *Bill*

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Next Month

Madam Forrester glances into her crystal ball to see what the future might bring.

Complete guide to budget games

No less than every budget game currently available for the CPC gets the AA review- and-rate treatment! Discover which are the essential purchases. It's a mammoth task, but I'm sure Dave's up to it. *(Hang on – I thought you agreed to this one! – Dave)*. I had my fingers crossed – ha!

Some serious debugging

There's nothing more annoying than writing a program, running it and finding out there's a bug that you just can't track down. *(Yes there is; East 17, for a start – Dave)*. Look, it's a figure of speech. Anyway, that doesn't matter. What does is that I'll be running a debugging masterclass. What a hero, eh?

Street Fighter 2 on Next Month page

Because we doubt there'll be any mention of it anywhere else in the mag – because Dave is banned all 'When's *Street Fighter 2* coming out?' letters from Reaction. But it had better come out soon because Dave's threatening to make me and Andy dress up as Chun Li and Blanka to maintain interest in the game.

Wynona Ryder reveals all...

...If Dave can convince her to. Which I somehow doubt. It's just another one of his fantasies. So in case the 18 pages he's put aside for the photos don't get filled that way, I'll make sure that all the regulars – Assembly Line, The Examiner, Public Image, Cheat Mode and Type-Ins – are there to fill the gap.

October issue on sale Thursday 23rd September

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